PULLER

Access	DB#	

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name:	SHOP	ROSE	Examiner #:	Date	MAY LY 2001
Art Unit: 1619	Phone Number	30 8 Y609	Serial Number:	08	840844
Mail Box and Bldg/Room	Location: CM/	2001 Resu	alts Format Preferred	(circle): PAPE	R DISK E-MAIL
If more than one search	is submitted, p	lease prioritiz	e searches in order	of need.	
Please provide a detailed staten Include the elected species or sutility of the invention. Define known. Please attach a copy of	nent of the search to tructures, keywords any terms that may	pic, and describe a synonyms, acron have a special me	as specifically as possible yms, and registry number aning. Give examples or	s and combine	with the company and
Title of Invention:					•
Inventors (please provide full	names):R	bert KRIC	MONTGOMORY		
Earliest Priority Filing Dat	te: 11 /	119/1997	·	·	• • •
For Sequence Searches Only P			— garent child divisional or i	ssued natout norm	hann) along sold it i
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	•	4 B C	actoride pero	ride	
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,			rodium perbora		
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(3) blead	hingh n & hoadly ?	Pain renov		of a gly	de longlax sin acete acid
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FILE COVERS 1947 - 29 May 2001 VOL 134 ISS 23 FILE LAST UPDATED: 28 May 2001 (20010528/ED)

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=> d que 144

L41 567 SEA FILE=HCAPLUS ABB=ON MONTGOMERY R?/AU
L44 19 SEA FILE=HCAPLUS ABB=ON L41 AND (DENT? OR TOOTH? OR TEETH?)

=> file wpids

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FILE LAST UPDATED: 28 MAY 2001

<20010528/UP>

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MOST RECENT DERWENT WEEK

200129 <200129/DW>

DERWENT WEEK FOR CHEMICAL CODING: 200129

DERWENT WEEK FOR POLYMER INDEXING: 200129

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=> d que 143

L41 567 SEA FILE=HCAPLUS ABB=ON MONTGOMERY R?/AU

L43 19 SEA FILE-WPIDS ABBON L41 AND (DENT? OR TOOTH? OR TEETH?)

=> dup rem 144 143

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FILE 'HCAPLUS' ENTERED AT 11:17:06 ON 29 MAY 2001
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FILE 'WPIDS' ENTERED AT 11:17:06 ON 29 MAY 2001
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PROCESSING COMPLETED FOR L44
PROCESSING COMPLETED FOR L43
L45
             25 DUP REM L44 L43 (13 DUPLICATES REMOVED)
=> d 145 all 1-25
                               COPYRIGHT 2001 ACS
L45 ANSWER 1 OF 25 HCAPLUS
     2001:294876 HCAPLUS
ΑN
     134:300656
DN
ΤT
     Tooth whitening compositions
IN
     Montgomery, R. Eric
     OraCeutical LLC, USA
PΑ
SO
     U.S., 10 pp.
     CODEN: USXXAM
DT
     Patent
     English
LA
IC
     ICM A61K007-16
          A61K007-20
     ICS
     424053000
NCL
     62-7 (Essential Oils and Cosmetics)
CC
FAN.CNT 1
     PATENT NO.
                       KIND
                             DATE
                                            APPLICATION NO.
                       ____
    US 6221341
                             20010424
                                            US 1998-196403
                       В1
                                                             19981119
PΙ
    VE 1997-66187
PRAI'
                       P
                             19971119
     Novel compns. and methods are disclosed for cosmetically treating
     teeth in a manner to increase brightness or shade of the
     teeth. The compns. include a low mol. wt. compd. having a high
     acetyl group functionality useful in the prodn. of a peroxy acid which
     then acts as a whitening agent. Toothpastes contain e.g.
     glyceryl triacetate and Na percarbonate.
ST
     tooth whitening compn glyceryl triacetate peroxide generator
ΙT
     Dentifrices
        (tooth whitening compns.)
     102-76-1, Glyceryl triacetate
IT
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (tooth whitening compns.)
                                 7722-84-1, Hydrogen peroxide, biological
TT
     79-21-0, Peroxyacetic acid
              15630-89-4, Sodium percarbonate
     RL: BUU (Biological use, unclassified); FMU (Formation, unclassified);
     BIOL (Biological study); FORM (Formation, nonpreparative); USES (Uses)
        (tooth whitening compns.)
RE.CNT
        26
RE
(1) Anon; EP 0545594 A1 1993 HCAPLUS
(2) Anon; WO 9320167 1993 HCAPLUS
(3) Anon; WO 970777 1994
(4) Anon; WO 9711676 1997 HCAPLUS
(5) Anon; WO 9940870 1999 HCAPLUS
(6) Boll; US 5151212 1992 HCAPLUS
(7) Broze; US 4800038 1989 HCAPLUS
(8) Broze; US 5047168 1991 HCAPLUS
(9) Church; US 5279816 1994 HCAPLUS
(10) Damani; US 5447725 1995 HCAPLUS
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(11) Davies; US 2955905 1960
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- (12) Jones; US 3956159 1976 HCAPLUS
- (13) Michaels; US 5885554 1999 HCAPLUS
- (14) Michaels; US 5939080 1999 HCAPLUS
- (15) Montgomery; US 5816802 1998
- (16) Montgomery; US 5908614 1999 HCAPLUS
- (17) Montgomery; US 5922307 1999 HCAPLUS
- (18) Nakagawa; US 3901819 1975 HCAPLUS
- (19) Nakagawa; US 4016090 1977 HCAPLUS
- (20) Russell; US 5102574 1992 HCAPLUS
- (21) Schepers; US 5011622 1991 HCAPLUS
- (22) Schepers; US 5503765 1996 HCAPLUS
- (23) Schow; US 5290566 1994 HCAPLUS
- (24) van der Hoeven; US 4950424 1990 HCAPLUS
- (25) Viscio; US 5302375 1994 HCAPLUS
- (26) Wilsbere; US 4610799 1986 HCAPLUS
- L45 ANSWER 2 OF 25 HCAPLUS COPYRIGHT 2001 ACS
- AN 2001:76610 HCAPLUS
- TI Familial tetralogy of Fallot caused by mutation in the jagged1 gene
- AU Eldadah, Zayd A.; Hamosh, Ada; Biery, Nancy J.; Montgomery, Robert A.; Duke, Melinda; Elkins, Ronald; Dietz, Harry C.
- CS Division of Cardiology, Institute of Genetic Medicine, The Johns Hopkins University School of Medicine, Baltimore, MD, 21287, USA
- SO Hum. Mol. Genet. (2001), 10(2), 163-169 CODEN: HMGEE5; ISSN: 0964-6906
 - Oxford University Press
- DT Journal

PB

- LA English
- CC 3 (Biochemical Genetics)
- Tetralogy of Fallot (ToF) is the most common form of complex congenital AB heart disease, occurring in .apprx.1 in 3000 live births. Evaluation of candidate loci in a large kindred segregating autosomal dominant ToF with reduced penetrance culminated in identification of a missense mutation (G274D) in JAG1, the gene encoding jagged1, a Notch ligand expressed in the developing right heart. Nine of eleven mutation carriers manifested cardiac disease, including classic ToF, ventricular septal defect with aortic dextroposition and isolated peripheral pulmonic stenosis (PPS). All forms of ToF were represented, including variants with pulmonic stenosis, pulmonic atresia and absent pulmonary valve. No individual within this family met diagnostic criteria for any previously described clin. syndrome, including Alagille syndrome (AGS), caused by haploinsufficiency for jaggedl. All mutation carriers had characteristic but variable facial features, including long, narrow and upslanting palpebral fissures, prominent nasal bridge, square dental arch and broad, prominent chin. This appearance was distinct from that of unaffected family members and typical AGS patients. The glycine corresponding to position 274 is highly conserved in other epidermal growth factor-like domains of jagged1 and in those of other proteins. substitution in other proteins has been assocd. with mild or atypical variants of disease. These data support either a relative loss-of-function or a gain-of-function pathogenetic mechanism in this family and suggest that JAG1 mutations may contribute significantly to common variants of right heart obstructive disease.

RE.CNT 31

RE

- (1) Alagille, D; J Pediatr 1975, V86, P63 MEDLINE
- (2) Altschul, S; Nucleic Acids Res 1997, V25, P3389 HCAPLUS
- (3) Crosnier, C; Gastroenterology 1999, V116, P1141 MEDLINE
- (4) Denton, P; Blood 1988, V72, P1407 HCAPLUS
- (5) Dietz, H; J Clin Invest 1992, V89, P1674 HCAPLUS
- (6) Donovan, M; Nature Genet 1996, V14, P210 HCAPLUS
- (7) Emerick, K; Hepatology 1999, V29, P822 MEDLINE
- (8) Francke, U; Am J Hum Genet 1995, V56, P1287 HCAPLUS

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(9) Frischmeyer, P; Hum Mol Genet 1999, V8, P1893 HCAPLUS
(10) Hamosh, A; Hum Mol Genet 1992, V1, P542 HCAPLUS
(11) Hou, J; J Formos Med Assoc 1997, V96, P419 MEDLINE
(12) Krantz, I; Am J Hum Genet 1998, V62, P1361 HCAPLUS (13) Krantz, I; Am J Med Genet 1999, V84, P56 MEDLINE
(14) Lathrop, G; Proc Natl Acad Sci USA 1984, V81, P3443 MEDLINE
(15) Li, L; Nature Genet 1997, V16, P243 HCAPLUS
(16) Lindsell, C; Cell 1995, V80, P909 HCAPLUS
(17) Lindsell, C; Mol Cell Neurosci 1996, V8, P14 HCAPLUS
(18) Lissemore, J; Mol Phylogenet Evol 1999, V11, P308 HCAPLUS
(19) Loomes, K; Hum Mol Genet 1999, V8, P2443 HCAPLUS
(20) Lu, J; Pediatrics 1999, V104, P87 MEDLINE
(21) Mehraein, Y; Hum Genet 1997, V99, P433 HCAPLUS
(22) Nijbroek, G; Am J Hum Genet 1995, V57, P8 HCAPLUS
(23) Oda, T; Genomics 1997, V43, P376 HCAPLUS
(24) Oda, T; Nature Genet 1997, V16, P235 HCAPLUS (25) Ozcelik, T; Genomics 1991, V10, P569 HCAPLUS
(26) Ozeki, H; Jpn J Ophthalmol 1997, V41, P422 MEDLINE
(27) Schrijver, I; Am J Hum Genet 1999, V65, P1007 MEDLINE (28) Sheffield, V; Hum Mol Genet 1997, V6, P117 HCAPLUS (29) Stone, D; Hum Mol Genet 1998, V7, P475 HCAPLUS
(30) Whiteman, P; J Biol Chem 1998, V273, P7807 HCAPLUS
(31) Xue, Y; Hum Mol Genet 1999, V8, P723 HCAPLUS
     ANSWER 3 OF 25 HCAPLUS COPYRIGHT 2001 ACS
                                                               DUPLICATE 1
L45
ΑN
     2000:314489
                   HCAPLUS
DN
     132:326095
TΙ
     Antimicrobial compositions that protect skin and dental tissue
IN
     Nathoo, Salim A.; Montgomery, R. Eric
PΑ
SO
     PCT Int. Appl., 23 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
     ICM A61C005-00
IC
          A61K007-16; A61K031-00; A61K031-74; C07C041-00
     63-7 (Pharmaceuticals)
     Section cross-reference(s): 62
FAN.CNT 1
     PATENT NO.
                         KIND
                                                 APPLICATION NO.
     WO 2000025697
                                20000511
                                                WO 1999-US26073
ΡI
                         A1
                                                                    19991104
              AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
              CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
               IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
              MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
              SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ,
              BY, KG, KZ, MD, RU, TJ, TM
          RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
              DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
               CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRAI US 1998-107026
                          Ρ
                                19981104
     Disclosed are compns. contg. at least one antimicrobial agent and at least
AΒ
     one volatile solvent. The compns. are applied to biol. substrates such as
     skin, keratinous tissue (e.g., finger nails and toenails) and
     dental tissue (e.g., teeth and surrounding soft tissue).
     A residue of the antimicrobial agent is left on the substrate, inhibiting
     microbial growth for a given period of time. The compns. are particularly
     useful in the course of dental procedures. In these
     embodiments, they are applied to teeth that have been drilled or
     otherwise prepd. to receive a dental restorative compn. such as
     a filling or crown, or a dental prosthetic device. An
     antimicrobial dental primer and adhesive compn. contained
     triclosan 0.2, acetone 79.91, urethane dimethacrylate 10,
                                 KATHLEEN FULLER EIC1700 308-4290
```

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methacryloyloxyethyl maleate 5, triethylene glycol dimethacrylate 5,
     camphorquinone 0.25, and 4-Et dimethylaminobenzoate 0.6 %.
     dental skin compn antimicrobial volatile solvent; triclosan
ST
     acetone adhesive dental primer -
TΤ
     Dental materials and appliances
        (adhesives; antimicrobial compns. for protection of skin and
      dental tissue)
     Antibacterial agents
TT
     Cosmetics
        (antimicrobial compns. for protection of skin and dental
        tissue)
IT
     Phenols, biological studies
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (antimicrobial compns. for protection of skin and dental
        tissue)
IT
     Alcohols, biological studies
     Aldehydes, biological studies
     Ketones, biological studies
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (as volatile solvent; antimicrobial compns. for protection of skin and
      dental tissue)
     Anti-inflammatory agents
IT
        (nonsteroidal; antimicrobial compns. for protection of skin and
      dental tissue)
IT
     Dental materials and appliances
        (primers; antimicrobial compns. for protection of skin and
      dental tissue)
IT
     65-85-0D, Benzoic acid, esters
                                      87-17-2D, Salicylanilide, halogenated
     derivs.
               3380-34-5, Triclosan
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (antimicrobial compns. for protection of skin and dental
        tissue)
TT
     60-29-7, Diethyl ether, biological studies
                                                  64-17-5, Ethanol, biological
               67-64-1, Acetone, biological studies
                                                     123-38-6,
     Propionaldehyde, biological studies
                                          141-78-6, Ethyl acetate, biological
               2530-85-0
     studies
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (as volatile solvent; antimicrobial compns. for protection of skin and
      dental tissue)
RE.CNT
       5
RE
(1) Mitra; US 5866630 A 1999 HCAPLUS
(2) Mitra; US 5876208 A 1999
(3) Mitra; US 5888491 A 1999 HCAPLUS
(4) Rozzi; US 5607663 A 1997 HCAPLUS
(5) Rozzi; US 5662887 A 1997 HCAPLUS
    ANSWER 4 OF 25 HCAPLUS COPYRIGHT 2001 ACS
                                                        DUPLICATE 2
L45
     1999:549130 HCAPLUS
ΑN
DN
     131:161675
ΤI
     Curable compositions with antimicrobial properties
     Montgomery, R. Eric; Nathoo, Salim A.
ΙN
     Oraceutical, LLC, USA
PA
     PCT Int. Appl., 36 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     English
     ICM A61K006-00
IC
     63-7 (Pharmaceuticals)
CC
FAN.CNT 2
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PATENT NO.
                      KIND
                            DATE
                                            APPLICATION NO.
                                                             DATE
                            19990826
                                           WO 1999-US3651
                                                             19990219
PΙ
     WO 9942080
                       A2
     WO 9942080
                       A3
                            19991007
            AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,
             KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN,
             MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
             TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU,
             TJ, TM
         RW: GH, GM,
                     KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
             FI, FR,
                     GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
                     GN, GW, ML, MR, NE, SN, TD, TG
             CM, GA,
                            19990906
                                           AU 1999-33038
                                                             19990219
     AU 9933038
                       Α1
     EP 1056430
                       A2
                            20001206
                                           EP 1999-934240
                                                             19990219
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
                            19980219
PRAI US 1998-75176
                       Ρ
                       Ρ
                            19980219
     US 1998-75246
     US 1998-94823
                       Ρ
                            19980731
                       W
     WO 1999-US3651
                            19990219
AB
     Novel curable compns. are disclosed which include a water insol.
     antimicrobial agent. The curable compns. are useful in inhibiting the
     growth of bacteria on the surface of the curable compn., within the
     curable compns. and in a vol. adjacent to the curable compn. Herculite
     XRV restorative material was modified to include triclosan. The
     antimicrobial activity of triclosan was demonstrated after release into
     bacteria media.
ST
     dental curable compn antimicrobial
ΙT
     Dental materials and appliances
        (adhesives; antimicrobial denture adhesive compn.)
ΙT
     Antibacterial agents
     Dental materials and appliances
     Polymerization catalysts
     Prosthetic materials and Prosthetics
        (antimicrobial denture adhesive compn.)
TΤ
     Polyvinyl butyrals
     RL: POF (Polymer in formulation); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (antimicrobial denture adhesive compn.)
ΙT
     Fluoropolymers, biological studies
     RL: POF (Polymer in formulation); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (curable dental compns. with antimicrobial properties)
IT
     Dental materials and appliances
        (denture adhesives; antimicrobial denture adhesive
        compn.)
ΙT
     Aluminosilicate glasses
     Fluoride glasses
     RL: MOA (Modifier or additive use); POF (Polymer in formulation); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (fluoroaluminosilicate; antimicrobial denture adhesive
        compn.)
     Dental materials and appliances
IT
        (resins; antimicrobial denture adhesive compn.)
TΤ
     97-90-5, Ethylene glycol dimethacrylate
                                               109-16-0, Triethylene glycol
                      2082-81-7 2358-84-1
                                               3290-92-4, Trimethylolpropane
     dimethacrylate
                     6606-59-3, 1,6-Hexanediol dimethacrylate
                                                                   25852-47-5,
     trimethacrylate
     Polyethylene glycol dimethacrylate 72829-09-5, 1,12-Dodecanediol
     dimethacrylate
     RL: POF (Polymer in formulation); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (crosslinking agent; curable dental compns. with
        antimicrobial properties)
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11.

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IT
     3380-34-5
     RL: BAC (Biological activity or effector, except adverse); PEP (Physical,
     engineering or chemical process); POF (Polymer in formulation); THU
     (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
        (curable dental compns. with antimicrobial properties)
     94-36-0, Benzoyl peroxide, biological studies 105-74-8, Lauroyl peroxide
TΤ
     RL: CAT (Catalyst use); POF (Polymer in formulation); THU (Therapeutic
     use); BIOL (Biological study); USES (Uses)
        (curable dental compns. with antimicrobial properties)
IT
     1306-06-5, Hydroxyapatite
                                 1344-28-1, Aluminum oxide (Al2O3), biological
               7631-86-9, Silica, biological studies 13463-67-7, Titania,
     studies
     biological studies 14808-60-7, Quartz, biological studies RL: MOA (Modifier or additive use); POF (Polymer in formulation); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (curable dental compns. with antimicrobial properties)
                                                87-17-2D, Salicylanilide, halo
ΙT
     65-85-0D, Benzoic acid, esters
                                      80-62-6
               97-63-2, Ethyl methacrylate 97-86-9, Isobutyl methacrylate
     derivs.
                                  101-84-8D, Diphenyl ether, halo derivs.
     97-88-1, Butyl methacrylate
     102-07-8D, Carbanilide, halo derivs.
                                            108-95-2D, Phenol, derivs.
     868-77-9
                1565-94-2, Bis-GMA
                                      2210-28-8, Propyl methacrylate
     2455-24-5, Tetrahydrofurfuryl methacrylate 4655-34-9, Isopropyl
                                7534-94-3, Isobornyl methacrylate
                    5888-33-5
                                                                      9002-84-0
     methacrylate
                                9003-01-4, Poly(acrylic acid) 9003-07-0, Polyvinyl acetate 9003-39-8, Pvp 9003
     9002-88-4, Polyethylene
     Polypropylene
                     9003-20-7, Polyvinyl acetate
                                                                       9003-42-3,
     Poly(ethyl methacrylate) 9003-63-8, Poly(butyl methacrylate)
     9011-14-7, Poly(methyl methacrylate)
                                             9011-16-9, Maleic anhydridemethyl
     vinyl ether copolymer 20166-49-8 25087-26-7, Poly(methacrylic acid)
     25685-29-4, Ethyl methacrylatemethyl methacrylate copolymer
                                                                     25736-86-1,
     Polyethylene glycol monomethacrylate 27813-02-1, Hydroxypropyl
                    29721-79-7, Hydroxybutyl methacrylate
     methacrylate
                                                             41637-38-1,
     Ethoxylated bisphenol A dimethacrylate
                                              45103-58-0, Methoxyethoxyethyl
                    45127-97-7, 2-Propenoic acid, 2-methyl-,
     methacrylate
                                      72869-86-4, Urethane dimethacrylate
     2-(2-ethoxyethoxy)ethyl ester
     RL: POF (Polymer in formulation); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (curable dental compns. with antimicrobial properties)
     ANSWER 5 OF 25 HCAPLUS COPYRIGHT 2001 ACS
                                                         DUPLICATE 3
L45
     1999:549129 HCAPLUS
ΑN
DN
     131:161674
ΤI
     Antimicrobial denture adhesive composition
     Montgomery, R. Eric; Wolf, Robert O.
IN
PA
     Oraceutical, LLC, USA
SO
     PCT Int. Appl., 34 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
     ICM A61K006-00
IC
CC
     63-7 (Pharmaceuticals)
FAN.CNT 2
     PATENT NO.
                      KIND
                             DATE
                                            APPLICATION NO.
                                                              DATE
                       ____
                             19990826
                                            WO 1999-US3588
                                                              19990219
     WO 9942079
                       Α2
PΙ
                       А3
                             19991014
     WO 9942079
             AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,
             KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN,
             MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
             TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU,
             TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                            AU 1999-27744
     AU 9927744
                       Α1
                             19990906
                              KATHLEEN FULLER EIC1700 308-4290
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EP 1999-908266
                       Α2
                            20001206
                                                             19990219
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
PRAI US 1998-75176
                       Ρ
                            19980219
     US 1998-75246
                       Ρ
                            19980219
     US 1998-94823
                       Ρ
                             19980731
                       W
                            19990219
     WO 1999-US3588
     Novel curable compns. are disclosed which include a water insol.
AΒ
     antimicrobial agent. The curable compns. are useful in inhibiting the
     growth of bacteria on the surface of the curable compn., within the
     curable compns. and in a vol. adjacent to the curable compn. Com.
     available permanent restorative Herculite XRV was modified to include
     water-insol. triclosan. Triclosan was release into surrounding media in
     sufficiently high concs. to inhibit growth of Streptococcus mutans and
     Pseudomonas aeruginosa.
     antibacterial denture adhesive; triclosan denture
ST
     adhesive
ΙT
     Antibacterial agents
     Streptococcus mutans
        (antimicrobial denture adhesive compn.)
IT
     Dental materials and appliances
        (denture adhesives; antimicrobial denture adhesive
        compn.)
ΊT
     3380-34-5
     RL: BAC (Biological activity or effector, except adverse); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (antimicrobial denture adhesive compn.)
                                      87-17-2D, Salicylanilide, halo derivs.
ΙT
     65-85-0D, Benzoic acid, esters
     101-84-8D, Diphenyl ether, halo derivs. 102-07-8D, Carbanilide, halo
               108-95-2D, Phenol, derivs.
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (antimicrobial denture adhesive compn.)
     ANSWER 6 OF 25 HCAPLUS COPYRIGHT 2001 ACS
                                                        DUPLICATE 4
L45
     1999:528989
                 HCAPLUS
AN
DN
     131:149112
TΤ
     Light-activated tooth whitening composition and method of using
     Montgomery, Robert Eric; Nathoo, Salim A.; Cipolla, Anthony John
ΙN
PA
     Britesmile, Inc., USA
SO
     PCT Int. Appl., 46 pp.
     CODEN: PIXXD2
\mathsf{DT}
     Patent
LA
     English
     ICM A61C003-00
IC
          A61C005-00; A61K007-16; A61K033-40
     62-7 (Essential Oils and Cosmetics)
     Section cross-reference(s): 63
FAN.CNT 1
     PATENT NO.
                      KIND
                            DATE
                                            APPLICATION NO.
                                           WO 1999-US3100
                            19990819
                                                             19990212
PΙ
     WO 9940870
                       Α1
             AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,
             KE, KG, KP, KR, KZ; LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN,
             MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
             TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ,
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             CM.
                GA, GN, GW, ML, MR, NE, SN, TD, TG
     US 6162055
                                            US 1999-234038
                       Α
                            20001219
                                                             19990119
                                            AU 1999-27647
     AU 9927647
                            19990830
                                                             19990212
                       Α1
                                           EP 1999-908146
     EP 1054642
                            20001129
                                                             19990212
                       Α1
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
                             KATHLEEN FULLER EIC1700 308-4290
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IE, SI, LT, LV, FI, RO
     NO 2000004046
                            20000925
                                           NO 2000-4046
                                                            20000811
                       Α
PRAI US 1998-74708
                       Ρ
                            19980213
     US 1998-75222
                       Ρ
                            19980219
    US 1999-233793
                       Α
                            19990119
                       Α
                            19990119
     US 1999-234038
                       W
                            19990212
    WO 1999-US3100
    The present invention provides a tooth whitening compn. having a
AΒ
     transparent first component that is a carrier compd. and a transparent
     second component that is an oxidizing compd. which when applied to a
     stained tooth and exposed to actinic light is activated to
     facilitate tooth whitening. The invention also provides a
    method for light-activated tooth whitening which comprises
    applying a tooth-whitening compn. to one or more teeth
    and exposing the compn. to actinic light to activate the oxidizing compd.
    The present invention further provides a device for tooth
    whitening which has a light source, at least one optical output, a
    projection means for holding and positioning the optical output outside of
    a patient's mouth in a manner so as to provide approx. simultaneous and
    uniform illumination of a patient's front teeth by the optical
    output; and a connection means for connecting the light source to the
    optical output. The invention also provides methods of using the device.
    A transparent gel was prepd. contg. distd. water 49.4,
     1-hydroxyethylidene-1,1-diphosphonic acid 1, glycerin 5, hydrogen peroxide
     (35 %) 42.9, Carbopol 974P 1.7%, and ammonium hydroxide (29 %) q.s. to pH
     5.5. Stained bovine enamel slabs were coated with a 1-2 mm film of the
     compn. and exposed to pulsed actinic radiation from an argon plasma arc
     light source.
ST
    light activated tooth whitening peroxide carboxypolymethylene
TT
    Dental materials and appliances
        (devices equipped with light source and optical output; light-activated
      tooth whitening compns. contg. carboxypolymethylene gel and
        oxidants and photoactivators)
IT
    Ketones, biological studies
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (diketones; light-activated tooth whitening compns. contg.
        carboxypolymethylene gel and oxidants and photoactivators)
IT
    Fiber optics
        (fiber-optic instruments; light-activated tooth whitening
        compns. contq. carboxypolymethylene gel and oxidants and
       photoactivators)
ΙT
    Optical instruments
        (fiber-optic; light-activated tooth whitening compns. contg.
        carboxypolymethylene gel and oxidants and photoactivators)
IT
    Bleaching
    Dental materials and appliances
    Photosensitizers (pharmaceutical)
     Tooth
        (light-activated tooth whitening compns. contq.
        carboxypolymethylene gel and oxidants and photoactivators)
IT
    Metallophthalocyanines
     Peroxy acids
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (light-activated tooth whitening compns. contg.
        carboxypolymethylene gel and oxidants and photoactivators)
IT
     Semiconductor materials
        (particles; light-activated tooth whitening compns. contg.
        carboxypolymethylene gel and oxidants and photoactivators)
IT
    Alkali metal oxides
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (peroxides; light-activated tooth whitening compns. contg.
                             KATHLEEN FULLER EIC1700 308-4290
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carboxypolymethylene gel and oxidants and photoactivators)
     95-14-7D, 1H-Benzotriazole, derivs. 119-61-9D, Benzophenone, derivs.
IT
                                    563-69-9D, Percarbonic acid, alkali metal
     124-43-6, Carbamide peroxide
             2809-21-4, 1-Hydroxyethylidene-1,1-diphosphonic acid
                                                                     7722-84-1,
     Hydrogen peroxide, biological studies
                                             12674-33-8D, Perboric acid, alkali
                   151687-96-6, Carbopol 974p
     metal salts
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (light-activated tooth whitening compns. contg.
        carboxypolymethylene gel and oxidants and photoactivators)
     1314-13-2, Zinc oxide, biological studies 13463-67-7, Titania,
IT
     biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (particles; light-activated tooth whitening compns. contg.
        carboxypolymethylene gel and oxidants and photoactivators)
IT
     50-78-2, Acetylsalicylic acid 102-76-1, Glycerol triacetate
                                                                      10543-57-4
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (peroxyacid precursor; light-activated tooth whitening
        compns. contg. carboxypolymethylene gel and oxidants and
        photoactivators)
RE.CNT
        15
RE
(1) Ardiot; FR 2645734 A1 1990
(2) Becker; US 4952143 A 1990
(3) Benedict; US 4256730 A 1981 HCAPLUS
(4) Cheslak; US 4790752 A 1988
(5) Cheslak; US 4790752 A 1988
(6) Church; US 5279816 A 1994 HCAPLUS
(7) Friedman; US 4661070 A 1987
(8) Montgomery; US 5816802 A 1998
(9) Montgomery; WO 9804235 Al 1998 HCAPLUS
(10) Pellico; US 5718886 A 1998 HCAPLUS
(11) Prencipe; US 5256402 A 1993 HCAPLUS
(12) Rudy; US 4971782 A 1990 HCAPLUS
(13) Ultradent Products Inc; WO 9114650 A1 1991 HCAPLUS
(14) Viscio; US 5302375 A 1994 HCAPLUS
(15) Zaragoza, T; US 4983381 A 1991
     ANSWER 7 OF 25 HCAPLUS COPYRIGHT 2001 ACS
                                                        DUPLICATE 5
L45.
ΑN
     1998:98301
                HCAPLUS
DN
     128:145181
ΤI
     Chlorine dioxide tooth whitening compositions
ΙN
     Montgomery, Robert Eric
     Montgomery, Robert Eric, USA
PA
SO
     PCT Int. Appl., 20 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
IC
     ICM A61K007-20
          A61K007-16
CC
     62-7 (Essential Oils and Cosmetics)
FAN.CNT 1
     PATENT NO.
                                            APPLICATION NO.
                                                             DATE
                      KIND
                            DATE
                            19980205
                                           WO 1997-US13467
PΙ
     WO 9804235
                       Α1
                                                             19970728
             AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ,
             LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL,
             PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ,
             VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR,
             GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA,
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1

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GN, ML, MR, NE, SN, TD, TG
                       AA
                            19980205
                                            CA 1997-2261741
                                                             19970728
     CA 2261741
     AU 9739674
                       A1
                            19980220
                                           AU 1997-39674
                                                             19970728
     EP 917455
                       Α1
                            19990526
                                           EP 1997-937070
                                                             19970728
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
     US 5944528
                       Α
                            19990831
                                            US 1997-901261
                                                             19970728
                       Α
                            19990929
                                            CN 1997-197855
                                                             19970728
     CN 1230107
                       Α
                            20001024
                                           BR 1997-10779
                                                             19970728
     BR 9710779
                            20001205
     JP 2000516221
                       Т2
                                            JP 1998-509145
                                                             19970728
                       Р
                            19960729
PRAI US 1996-22384
     WO 1997-US13467
                       W
                            19970728
     A compn. having an effective dosage of chlorine dioxide for causing a
AB
     visible change in the whiteness of a tooth surface is disclosed.
     The compn. includes a first formulation having a chlorine dioxide
     precursor and a second formulation having an acidulant capable of
     generating chlorine dioxide upon contact with the precursor. Upon admixt.
     of the first and second formulations to produce chlorine dioxide, the
     compn. has a pH in the range of from about 3.0 to about 4.5. To whiten
     teeth, the first and second formulations may be mixed with one
     another prior to application of the resulting mixt. to the teeth
        Alternatively, one of the first and second formulations may initially
     be applied to the teeth prior to the application of the
     remaining formulation. The inventive compn. is formulated to cause a
     visible change in the whiteness of a tooth surface in a
     relatively short period of time. A chlorine dioxide precursor compn.
     contained water 983.3, and sodium chlorite 16.7g. An acidulant compn.
     contained water 913.1, glycerin 50.0, methylparabén 1.5, Carbopol 974P
     50.0, anhyd. citric acid 3.0, and sodium hydroxide 2.4g. The mixt. of
     above compns. was effective in removing tooth stains in an in
     vitro stained bovine enamel model.
ST
     chlorine dioxide tooth whitening acid dentifrice
     Polymers, biological studies
IΤ
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (acid-stable; chlorine dioxide tooth whitening compns.)
ΙT
     Chlorates
     Chlorites
     RL: RCT (Reactant)
        (alkali metal salts; chlorine dioxide tooth whitening
        compns.)
IT
     Dentifrices
     Stabilizing agents
     Thickening agents
        (chlorine dioxide tooth whitening compns.)
     Polyoxyalkylenes, biological studies
IT
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (chlorine dioxide tooth whitening compns.)
IT
     Acids, reactions
     RL: RCT (Reactant)
        (chlorine dioxide tooth whitening compns.)
IT
     9000-30-0, Guar gum
                           11138-66-2, Xanthan gum
                                                      25322-68-3
                                                                   151687-96-6,
     Carbopol 974P
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (chlorine dioxide tooth whitening compns.)
IT
     10049-04-4P, Chlorine dioxide
     RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (chlorine dioxide tooth whitening compns.)
                                       6915-15-7, Malic acid
                                                                7758-19-2,
IT
     77-92-9, Citric acid, reactions
                       9007-20-9, Carboxypolymethylene
     Sodium chlorite
     RL: RCT (Reactant)
                             KATHLEEN FULLER EIC1700 308-4290
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(chlorine dioxide tooth whitening compns.)

ANSWER 8 OF 25 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD L451998-556117 [47] WPIDS AN DNN N1998-433511 Flexible dental tray for bleaching teeth - has two ΤI surfaces with connector defining upper and lower troughs with different curvatures to users teeth. DC P32 MONTGOMERY, R E IN (INDE-N) INDEX DENTAL SCI INC; (MONT-I) MONTGOMERY R E PΑ CYC 1 A 19981006 (199847)* A61C007-08 PΙ US 5816802 g US 5816802 A US 1995-533148 19950925 ADT PRAI US 1995-533148 19950925 ICM A61C007-08 ΙC A61C017-00 ICS 5816802 A UPAB: 19981125 AB US The dental tray has two surfaces (100,115), each with a radius of curvature different from that of a dentition of the user, and a connector (130) joining the two surfaces. The connector and the surfaces are integrally moulded to define an upper trough (135) and a lower trough (140), each with a radius of curvature different from that of the dentition of the user. When the tray is inserted into the user's mouth, the surfaces apply pressure against tooth surfaces of the user. A tooth bleaching composition within the upper and lower troughs of the tray comes into contact with the user's teeth. ADVANTAGE - Exerts pressure on the tooth surface when worn by the user. Dwg.1/6 FS GMPI FΑ AB; GI ANSWER 9 OF 25 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD L45AN. 1998-270833 [24] WPIDS DNN N1998-212726 Pattern sizing tool for use as milling device to remove portion of surface TIof stiff material - includes pair of upper and lower arms that are coupled together at their ends to be scissored and are spring biased apart. DC P54 IN MONTGOMERY, R B PΑ (MONT-I) MONTGOMERY R B CYC A 19980428 (199824)* q8 B23C001-20 PΙ US 5743686 ADT US 5743686 A US 1996-747251 19961118 PRAI US 1996-747251 19961118 ICM B23C001-20 IC 5743686 A UPAB: 19980617 ΑB The tool (10) includes a pair of upper (15) and lower (16) arms that are coupled together at their ends to be scissored and are spring biased apart. The upper arm includes a mount (20) with an arrangement for maintaining a dental rotary grinder on it that has a chuck for mounting a milling burr (12). The milling burr has a surface (13) opposite to an end of a footing that is maintained to extend from the lower arm whereby, when a dental technician manually moves the tool arms together the milling burr surface is moved towards the footing end whereon that technician has positioned a hard plastic coping (11), or the like, that is preferably formed from a light cure resinous material. The tool includes a stop to limit travel of the turning milling burr surface towards the footing end and is used by the technician to mill the

process until the entire coping surface has been milled. KATHLEEN FULLER EIC1700 308-4290

coping to a desired wall thickness, by the technician manually moving the arms together, and repositioning the coping on the footing who repeats the

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USE - Particularly useful for milling a hard plastic coping like that
     produced in a tooth replacement procedure for forming, from that
     coping, a crown as a replacement tooth in a practice of a ''lost
     wax casting procedure''.
     Dwg.1/3
     GMPI
FS
FA
     AB; GI
     ANSWER 10 OF 25 HCAPLUS COPYRIGHT 2001 ACS
                                                          DUPLICATE 6
T.45
ΑN
     1997:332433 HCAPLUS
     126:308649
DN
TΙ
     Tooth bleaching compositions containing hydrogen peroxide
     Montgomery, Robert Eric
ΙN
     Montgomery, Robert Eric, USA
PA
     PCT Int. Appl., 21 pp.
SO
     CODEN: PIXXD2
DT
     Patent
     English
LA
     ICM A61K007-20
TC
     ICS A61K007-00
CC
     62-7 (Essential Oils and Cosmetics)
FAN. CNT 1
     PATENT NO.
                       KIND
                             DATE
                                             APPLICATION NO.
                                                               DATE
                             19970403
                                             WO 1996-US15366
                                                               19960925
PΙ
     WO 9711676
                        Α1
            AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE,
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             SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
         RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,
             IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA
     CA 2238764
                             19970403
                                             CA 1996-2238764 19960925
                        AΑ
                             19970417
                                             AU 1996-72455
                                                               19960925
     AU 9672455
                        Α1
                             19980909
                                             EP 1996-933896
                                                               19960925
     EP 862408
                        A1
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IEX
                 FT
    US 5922307
                             19990713
                                             US 1996-719569
                                                               19960925
     <del>US 1995-42</del>58
                             19950925
PRAI
     WO 1996-US15366
                             19960925
AΒ
     Hydrogen peroxide-contg. compns. that are maintained at a substantially
     const. pH range of 6.0-10.0 during the tooth-bleaching procedure
     in the presence of a calcium chelating agent are claimed. A stable
     tooth-bleaching formulation contained water 86.41,
     1-hydroxyethylidene-1,1-diphosphonic acid 0.02, sodium stannate trihydrate
     0.02, 35% hydrogen peroxide 10.30, Carbopol 974P 2.5%, and sodium
     hydroxide q.s. pH = 7.0.
ST
     tooth bleaching compn hydrogen peroxide
ΙT
     Diphosphates
     Polyphosphates
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (alkali metal salts; tooth bleaching compns. contg. hydrogen
        peroxide)
ΙT
     Chelating agents
     Dentifrices
     Stabilizing agents
     Thickening agents
         (tooth bleaching compns. contg. hydrogen peroxide)
IT
     563-69-9, Carbonoperoxoic acid
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
         (salts; tooth bleaching compns. contg. hydrogen peroxide)
                                           62-33-9, Calcium disodium edta
TΤ
     60-00-4, Edta, biological studies
                              KATHLEEN FULLER EIC1700 308-4290
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526-95-4, Gluconic acid

526-95-4D,

77-92-9, Citric acid, biological studies 77-92-9D, Citric acid, salts

124-43-6, Carbamide peroxide

L45

ΑN DN

ΤI

IN

PΑ

SO

DT

LA

IC

CC

PΙ

PRAIT

AB

ST

ΙT

IT

IT

IT

IT

ΙT

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2809-21-4, 1-Hydroxyethylidene-1,1-diphosphonic
    Gluconic acid, salts
            4452-58-8, Sodium percarbonate 7722-84-1, Hydrogen peroxide,
    biological studies
                         7758-16-9
                                      36411-33-3
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (tooth bleaching compns. contg. hydrogen peroxide)
    ANSWER 11 OF 25 HCAPLUS COPYRIGHT 2001 ACS
                                                       DUPLICATE 7
     1997:257483 HCAPLUS
     126:242633
    Peroxidase-activating oral care compositions
    Montgomery, Robert Eric
    Montgomery, Robert Eric, USA
     PCT Int. Appl., 26 pp.
     CODEN: PIXXD2
     Patent
    English
     ICM A61K007-20
     62-7 (Essential Oils and Cosmetics)
FAN.CNT 1
                                           APPLICATION NO.
                                                             DATE
     PATENT NO.
                      KIND
                            DATE
    WO 9707777
                       Α1
                            19970306
                                           WO 1996-US13240
                                                            19960815
            AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE,
             ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS,
             LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD,
             SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
        RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,
             IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA
     AU-9667254
                       A1
                            19970319
                                           AU 1996-67254
                                                             19960815
                                           US 1996-698474
    US 5908614
                       Α
                            19990601
                                                             19960815
    US 1995-2361
                            19950815
    US 1996-12537
                            19960229
    WO 1996-US13240
                            19960815
    An oral care compn. includes a nonenzymic water-sol. H2O2 precursor (e.g.
    an alkali metal percarbonate) which releases H2O2 upon contact with water
     to activate the peroxidase system in the oral cavity. The compn. further
     contains a pH-adjusting agent to produce a selected pH that facilitates
    the rapid release of H2O2 from the precursor. Thus, an oral gel contained
     glycerin 93.45, Carbopol 980 2.00, carbamide peroxide 0.05, distd. water
     3.00, and Tris buffer 1.50 g.
    peroxide precursor dentifrice; peroxidase activation mouth
    dentifrice
    Alkali metal hydroxides
    Amines, biological studies
    Organic acids
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (buffers; peroxidase-activating oral care compns.)
    Dentifrices
        (dental floss; peroxidase-activating oral care compns.)
    Dentifrices
        (gels; peroxidase-activating oral care compns.)
     Drug delivery systems
        (lozenges; peroxidase-activating oral care compns.)
        (peroxidase activation in; peroxidase-activating oral care compns.)
     Buffers
     Chewing gum
     Dentifrices
        (peroxidase-activating oral care compns.)
```

```
TΤ
    Ammonium polyphosphates
     Halides
     Peroxides, biological studies
     Sodium polyphosphates
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (peroxidase-activating oral care compns.)
IT
     Polyphosphoric acids
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (potassium salts; peroxidase-activating oral care compns.)
IT
     Hide
        (raw-, animal chews; peroxidase-activating oral care compns.)
TΥ
     9003-99-0, Peroxidase
     RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
        (activation of; peroxidase-activating oral care compns.)
     64-19-7, Acetic acid, biological studies 1336-21-6, Ammonium hydroxide
TT
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (buffer; peroxidase-activating oral care compns.)
IT
     7664-38-2D, Phosphoric acid, alkali metal salts
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (buffers; peroxidase-activating oral care compns.)
                                                         77-92-9, Citric acid,
IT
     68 - 04 - 2
              77-86-1, Tris(hydroxymethyl)aminomethane
     biological studies
                        102-71-6, Triethanolamine, biological studies
     107-92-6, Butyric acid, biological studies 110-94-1, Glutaric acid
                                                 124-43-6, Carbamide peroxide
     124-04-9, Adipic acid, biological studies
                                                              141-82-2, Malonic
     127-08-2, Potassium acetate 127-09-3, Sodium acetate
                               141-95-7, Sodium malonate 156-54-7, Sodium
    acid, biological studies
               299-27-4, Potassium gluconate
                                              333-20-0, Potassium thiocyanate
    butyrate
                                         526-95-4, Gluconic acid
     463-56-9D, Thiocyanic acid, salts
                                                                   527-07-1,
     Sodium gluconate 540-72-7, Sodium thiocyanate
                                                       563-69-9D, Percarbonic
                               585-09-1, Potassium malate
     acid, alkali metal salts
                                                             589-39-9,
                        631-61-8, Ammonium acetate
                                                       676-46-0, Sodium malate
     Potassium butyrate
                1310-58-3, Potassium hydroxide, biological studies
     Sodium hydroxide, biological studies
                                            3458-72-8
                                                        6283-27-8, Ammonium
              6915-15-7, Malic acid
                                      7320-34-5, Potassium pyrophosphate
     malate
                             7722-84-1D, Hydrogen peroxide, precursors
     7486-38-6
                 7632-05-5
                 10124-31-9
                              12674-33-8D, Perboric acid, alkali metal salts
     7722-88-5
     13095-67-5, Potassium malonate
                                      13521-83-0
                                                   13765-35-0
                                                                14287-04-8,
     Ammonium butyrate
                        15630-89-4
                                      16068-46-5
                                                   16887-00-6, Chloride,
                          18815-40-2, Ammonium malonate
                                                         19090-60-9, Ammonium
     biological studies
               19147-16-1
                            19222-41-4, Ammonium gluconate
                                                             20461-54-5,
     adipate
                                 24959-67-9, Bromide, biological studies
     Iodide, biological studies
     29750-34-3, Ammonium glutarate 39649-90-6, Potassium glutarate
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (peroxidase-activating oral care compns.)
IT
     63296-34-4P, Hypothiocyanite
     RL: PNU (Preparation, unclassified); PREP (Preparation)
        (peroxidase-activating oral care compns.)
    ANSWER 12 OF 25 HCAPLUS COPYRIGHT 2001 ACS
                                                       DUPLICATE 8
L45
ΑN
     1997:244361
                 HCAPLUS
DN
     126:224532
ΤI
     Improved proteinaceous animal chew with dentally therapeutic
     cation
IN
    Montgomery, Robert Eric
    Montgomery, Robert, Eric, USA
PA
     PCT Int. Appl., 13 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     English
```

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ICM A23K001-18
IC
          A23K001-17; A23K001-175; A61K007-16
     ICS
     17-12 (Food and Feed Chemistry)
CC
FAN.CNT 1
                       KIND
                              DATE
                                              APPLICATION NO.
     PATENT NO.
     WO 9706696
                              19970227
                                              WO 1996-US13236
                                                                19960815.
PΙ
                        Α1
            AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE,
             ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD,
         SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,
              IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA
     AU 9667752
                        Α1
                              19970312
                                              AU 1996-67752
                                                                19960815
                              20000613
                                              US 1996-698475
                                                                19960815
     US 6074662
                        Α
PRAI US 1995-2345
                        Р
                              19950815
                        W
                              19960815
     WO 1996-US13236
     This invention relates to chewable objects for animals which contain, as a
ΑB
     dentally therapeutic ingredient, one or more cationic substances.
     The inventive therapeutic animal chews are of sufficient durability to
     allow for a chewing cycle long enough for the release of the
     aforementioned cationic substances into saliva. Furthermore, the
     inventive animal chews may contain an effective amt. of a counter-ionic
     compd., such as an alkali metal salt, to allow for rapid solubilization of
     the cationic antimicrobial substance into the saliva of an animal chewing
     thereupon, esp. when delivered or carried on a carrier having a neg.
     charged surface.
ST
     rawhide chew dental therapeutic cation
ΙT
     Hygiene
        (animal dental; improved proteinaceous animal chew with
      dentally therapeutic cation)
IT
     Behavior (animal)
        (chewing; improved proteinaceous animal chew with dentally
        therapeutic cation)
ΙT
     Antimicrobial agents
        (improved proteinaceous animal chew with dentally therapeutic
        cation)
IT
     Alkylbenzyldimethylammonium chlorides
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (improved proteinaceous animal chew with dentally therapeutic
        cation)
IT
     Proteins (general), biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
         (rawhide chew; improved proteinaceous animal chew with dentally
        therapeutic cation)
TT
     64-19-7D, Acetic acid, sodium and potassium salts
                                                             526-95-4D, Gluconic
                                           527-07-1, Sodium gluconate
     acid, sodium and potassium salts
     7647-01-0D, Hydrochloric acid, sodium and potassium salts 10035-10-6D,
     Hydrobromic acid, sodium and potassium salts
     RL: PEP (Physical, engineering or chemical process); PROC (Process)
         (improved proteinaceous animal chew with dentally therapeutic
        cation)
     55-56-1, Chlorhexidine 56-95-1, Chlorhexidine diacetate
                                                                     121-54-0
IT
                               123-03-5
                                          538-71-6, Domiphen bromide
     Benzethonium chloride
     18472-51-0, Chlorhexidine digluconate
                                               22573-93-9, Alexidine
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
         (improved proteinaceous animal chew with dentally therapeutic
        cation)
L45
     ANSWER 13 OF 25 HCAPLUS COPYRIGHT 2001 ACS
     1997:780709 HCAPLUS
ΑN
     128:123187
DN
     Applications of a new methacrylate-based anion stationary phase for the
TΙ
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separation of inorganic anions ΑU Nair, Lakshmy M.; Saari-Nordhaus, Raaidah; Montgomery, Robert M. CS Waukegan Road, Alltech Associates, Deerfield, IL 60015, USA J. Chromatogr., A (1997), 789(1 + 2), 127-134 CODEN: JCRAEY; ISSN: 0021-9673SO Elsevier Science B.V. PΒ DT Journal English LA CC 79-4 (Inorganic Analytical Chemistry) Section cross-reference(s): 9, 56, 61, 64 AΒ A new methacrylate-based packing with quaternary amine functional groups for the anal. of inorg. anions by ion chromatog. is described. Columns packed with this new material work for both suppressor-based and single-column ion chromatog. methods. A variety of eluents such as carbonate-bicarbonate, phthalic acid and p-hydroxybenzoic acid are compatible with this column. The packing is stable under severe conditions such as switching from high pH to low pH eluents, or vice The hydrophilic nature of the packing provides excellent peak shape for all common inorg. anions, including hydrophobic anions such as nitrate and iodide. The performance of the column with different eluents is demonstrated along with the applications using both single-column and suppressor-based ion chromatog. systems. ST methacrylate anion stationary phase; anion sepn ion chromatog Allsep packing ΤT Dentifrices (anions detn. in toothpaste by ion chromatog. using Allsep stationary phase based on methacrylate with quaternary amine functional groups) IT Urine analysis (anions detn. in urine by ion chromatog. using Allsep stationary phase based on methacrylate with quaternary amine functional groups) ΙT Anion exchangers Anions (anions sepn. by ion chromatog. using Allsep stationary phase based on methacrylate with quaternary amine functional groups) ΤT Ion chromatographic stationary phases Ion chromatography (applications of new methacrylate-based anion stationary phase for sepn. of inorg. anions) ΙT 14343-69-2, Azide 14797-73-0, Perchlorate RL: ANT (Analyte); ANST (Analytical study) (anions detn. in air bag effluent by ion chromatog. using Allsep stationary phase based on methacrylate with quaternary amine functional groups) ΙT 7732-18-5, Water, analysis RL: AMX (Analytical matrix); ANST (Analytical study) (anions detn. in water by ion chromatog. using Allsep stationary phase based on methacrylate with quaternary amine functional groups) 302-04-5, Thiocyanate, analysis 144-62-7, Oxalic acid, analysis ΙT 14265-44-2, Phosphate, analysis 3812-32-6, Carbonate, analysis 14383-50-7, Thiosulfate (S2032-) 14797-55-8, Nitrate, analysis 14808-79-8, Sulfate, analysis 14797-65-0, Nitrite, analysis 14901-63-4, Phosphite 15460-68-1, Hypophosphite 16887-00-6, Chloride, 16984-48-8, Fluoride, analysis 20461-54-5, Iodide, analysis 24959-67-9, Bromide, analysis RL: ANT (Analyte); PEP (Physical, engineering or chemical process); ANST (Analytical study); PROC (Process) (anions sepn. by ion chromatog. using Allsep stationary phase based on methacrylate with quaternary amine functional groups) ΙT 201491-14-7, Allsep

RL: ARU (Analytical role, unclassified); PEP (Physical, engineering or chemical process); ANST (Analytical study); PROC (Process)
(anions sepn. by ion chromatog. using Allsep stationary phase based on methacrylate with quaternary amine functional groups)

KATHLEEN FULLER EIC1700 308-4290

```
17084-08-1, Hexafluorosilicate
IT
     11104-59-9, Chromate
     RL: ANT (Analyte); PEP (Physical, engineering or chemical process); ANST
     (Analytical study); PROC (Process)
        (hexafluorosilicate, nitrite, sulfate and chromate sepn. in chromate
        plating bath soln. by ion chromatog. using Allsep stationary phase
        based on methacrylate with quaternary amine functional groups) .
    ANSWER 14 OF 25 HCAPLUS COPYRIGHT 2001 ACS
                                                        DUPLICATE 9
L45
ΑN
     1994:541280 HCAPLUS
DN
     121:141280
ΤI
     Oral compositions with phosphorus-containing antiplaque anticalculus
     agents
    Montgomery, Ronald Earl; Pyrz, Joseph Wasyl; Coyle-Rees,
IN
    Margaret Mary
     Procter and Gamble Co., USA
PΑ
     PCT Int. Appl., 23 pp.
SO
     CODEN: PIXXD2
DT
     Patent
     English
LA
IC
     ICM A61K007-16
     62-7 (Essential Oils and Cosmetics)
CC
FAN.CNT 2
     PATENT NO.
                      KIND
                            DATE
                                           APPLICATION NO.
PΙ
     WO 9414407
                       A1
                            19940707
                                           WO 1993-US11787 19931206
         W: AU, BB, BG, BR, BY, CA, CZ, FI, HU, JP, KP, KR, KZ, LK, LV, MG,
             MN, MW, NO, NZ, PL, RO, RU, SD, SK, UA, UZ, VN
         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,
             BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
     CA 2151815
                       AΑ
                            19940707
                                           CA 1993-2151815 19931206
                                           CA 1993-2151913 19931206
     CA 2151913
                       AA
                            19940707
                                           AU 1994-57400
                                                             19931206
     AU 9457400
                       Α1
                            19940719
                                           EP 1994-903459
                                                             19931206
     EP 675706
                       Α1
                            19951011
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE
     HU 72041
                      Α2
                            19960328
                                           HU 1995-1784
                                                            19931206
     BR 9307688
                       Α
                            19990908
                                           BR 1993-7688
                                                             19931206
                                           CN 1993-119922
     CN 1095263
                                                             19931218
                       Α
                            19941123
PRAI US 1992-993336
                            19921218
    US 1993-148776
                            19931116
    WO 1993-US11787
                            19931206
     This invention involves a compn. for treating or preventing dental
AΒ
     plaque, calculus and gingivitis, or malodor of the oral cavity,
     comprising: (a) (i) a source of a safe and effective amt. of zinc ions;
     (ii) a source of citrate ions; and (iii) one or more anticalculus agents
     selected from the group consisting of pyrophosphate, phosphonate,
    diphosphonate and pharmaceutically-acceptable linear condensed
     polyphosphates of the general formula: [PnO(3n+1)](n+2)-, n = 2-21; the
    molar ratio of zinc to citrate or pyrophosphate is at most about 1:1; and
     (b) a pharmaceutically-acceptable topical oral carrier.
ST
    mouthwash antiplaque anticalculus citrate phosphorus zinc
IT
     Humectants
        (antiplaque and anticalculus mouthwash compns. contg.)
ΙT
    Mouthwashes
        (anticalculus, zinc and phosphorus-contg. compds. for)
IT
        (antiplaque, zinc and phosphorus-contg. compds. for)
IT
     Surfactants
        (nonionic, antiplaque and anticalculus mouthwash compns. contg.)
     64-17-5, Ethanol, biological studies
                                           77-92-9, Citric acid, biological
IT
              151-21-3, Sodium lauryl sulfate, biological studies
                     1314-13-2, Zinc oxide, biological studies
                                                                   2809-21-4,
     Sodium citrate
            7320-34-5, Tetrapotassium pyrophosphate
                                                      7440-66-6D, Zinc, salts
     7646-85-7, Zinc chloride (ZnCl2), biological studies 7681-49-4, Sodium
     fluoride, biological studies
                                    7722-88-5, Tetrasodium pyrophosphate
```

7723-14-0D, Phosphorus, compds.

Sodium acid pyrophosphate

7733-02-0, Zinc sulfate

7758-29-4, Sodium tripolyphosphate

7758-16-9,

```
7779-88-6, Zinc nitrate 29444-63-1D, Hexaphosphoric acid, salts
     56269-44-4, Azacycloheptane-2,2-diphosphonic acid
                                                         157171-69-2D, salts
     RL: BIOL (Biological study)
        (antiplaque and anticalculus mouthwash compns. contg.)
    ANSWER 15 OF 25 HCAPLUS COPYRIGHT 2001 ACS
L45
                                                       DUPLICATE 10
ΑN
     1994:541281 HCAPLUS
DN
     121:141281
ΤI
     Oral compositions with phosphorus-containing antiplaque and anticalculus
     agents
    Montgomery, Ronald Earl; Maddux, Angela Marie; Volpenhein,
IN
    Matthew Edward; Shanbhag, Vrinda Ramchandra
PA
     Procter and Gamble Co., USA
SO
     PCT Int. Appl., 23 pp.
     CODEN: PIXXD2
DT
     Patent
LA
    English
IC
     ICM A61K007-16
         A61K033-42; A61K033-30
     62-7 (Essential Oils and Cosmetics)
CC
FAN.CNT 2
     PATENT NO.
                      KIND
                            DATE
                                           APPLICATION NO.
     ______
                                           ______
                                           WO 1993-US11786
PΙ
     WO 9414406
                      Α1
                            19940707
                                                            19931206
           AU, BB, BG, BR, BY, CA, CZ, FI, HU, JP, KP, KR, KZ, LK, LV, MG,
             MN, MW, NO, NZ, PL, RO, RU, SD, SK, UA, UZ, VN
         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,
             BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
     CA 2151815
                       AA
                            19940707
                                           CA 1993-2151815 19931206
    AU 9457399
                            19940719
                                           AU 1994-57399
                                                             19931206
                       Α1
                            19951011
                                           EP 1994-903458
                                                             19931206
     EP 675705
                       Α1
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE
     HU 72042
                       A2
                            19960328
                                           HU 1995-1778
                                                            19931206
    JP 08504816
                       T2
                            19960528
                                           JP 1993-515184
                                                             19931206
                                           BR 1993-7689
     BR 9307689
                       Α
                            19990831
                                                             19931206
                                           CN 1993-119916
     CN 1095262
                       Α
                            19941123
                                                            19931218
PRAI US 1992-993336
                            19921218
     US 1993-148775
                            19931116
    WO 1993-US11786
                            19931206
AΒ
    This invention involves oral-care compns., comprising: (a) zinc oxide or
    nitrate; a source of citrate ions; and one or more phosphorus-contg.
     anticalculus agents selected from the group consisting of pyrophosphate,
     phosphonate, diphosphonate and pharmaceutically-acceptable linear
     condensed polyphosphates of the general formula: [PnO(3n+1)](n+2)-, n =
     2-21; the molar ratio of the zinc ions to citrate ions or
     phosphorus-contg. anticalculus agent is 1:1-1:20; and (b) a
     pharmaceutically-acceptable topical oral carrier. This invention also
     involves methods for treating or preventing dental plaque,
     calculus, gingivitis, or malodor of the oral cavity comprising
     administering to the oral cavity of a human or other animal a safe and
     effective amt. of such compns.
ST
    mouthwash antiplaque anticalculus citrate zinc phosphorus
IT
     Humectants
        (antiplaque and anticalculus mouthwash compns. contg.)
Τ·T
    Mouthwashes
        (anticalculus, phosphorus and zinc-contg. compds. for)
IT
        (antiplaque, phosphorus and zinc-contg. compds. for)
IT
     Surfactants
        (nonionic, antiplaque and anticalculus mouthwash compns. contg.)
     64-17-5, Ethanol, biological studies 77-92-9, Citric acid, biological
IT
               151-21-3, Sodium lauryl sulfate, biological studies
                             KATHLEEN FULLER EIC1700 308-4290
```

L45 ΑN

DN

TΙ ΙN

PA.

SO

DT

LA

IC

PI

AB

ST

TΤ

IT

TT

IT

oral pathogens)

```
1314-13-2, Zinc oxide, biological studies
                                                                  2809-21-4,
     Sodium citrate
                                                     7440-66-6D, Zinc, salts
           7320-34-5, Tetrapotassium pyrophosphate
     7681-49-4, Sodium fluoride, biological studies
                                                      7722-88-5, Tetrasodium
     pyrophosphate
                     7723-14-0D, Phosphorus, compds.
                                                      7758-16-9, Sodium acid
     pyrophosphate
                     7758-29-4, Sodium tripolyphosphate
                                                          7779-88-6, Zinc
    nitrate
              29444-63-1D, Hexaphosphoric acid, salts
                                                         56269-44-4,
    Azacycloheptane-2, 2-diphosphonic acid
                                             157171-69-2D, salts
    RL: BIOL (Biological study)
        (antiplaque and anticalculus mouthwash compns. contg.)
    ANSWER 16 OF 25 HCAPLUS COPYRIGHT 2001 ACS
     1994:279904 HCAPLUS
     120:279904
    Stabilized chewable antimicrobial foodstuff for animal
    Montgomery, Robert E.
   _.USA __.
     PCT Int. Appl., 30 pp.
    CODEN: PIXXD2
     Patent
    English
     ICM A61K007-28
         A61K037-50
     ICS
     62-7 (Essential Oils and Cosmetics)
     Section cross-reference(s): 18
FAN.CNT 1
     PATENT NO.
                      KIND
                            DATE
                                           APPLICATION NO.
     ______
                                           ______
    WO 9405252
                            19940317
                                           WO 1993-US8086
                                                            19930827
                      A1
         W: AU, CA
         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
     US 5310541
                      Α
                            19940510
                                           US 1992-936929
                                                            19920827
    EP 658096
                      Α1
                            19950621
                                           EP 1993-921221
                                                            19930827
    EP 658096
                      В1
                            19991103
        R: DE, ES, FR, GB, IT, NL
    ES 2141171
                      Т3
                            20000316
                                           ES 1993-921221
                                                            19930827
PRAI US 1992-936929
                            19920827
    WO 1993-US8086
                            19930827
    The invention is an animal chew which contains one or more enzymes and
     substrates for the purpose of generating antimicrobial compds. upon
     contact with an animal's saliva. The animal chew, made of rawhide,
    biscuit or dried animal food is provided with an oxidoreductase enzyme and
     substrate, such as glucose oxidase and glucose, which produces H2O2 upon
    being chewed. A catalase may be provided to stabilize the system and
    prevent premature activation of the enzyme/substrate system. A peroxidase
    and halide or pseudohalide ion combination may be provided to enhance the
    antimicrobial effect of the invention.
    chewable antimicrobial animal dentifrice enzyme peroxide
    Chlorides, biological studies
    Halides
     Iodides, biological studies
     Pseudohalides
     RL: BIOL (Biological study)
        (antimicrobial animal chewing foodstuff contg. oxidoreductase and
       peroxidase and, for inhibiting oral pathogens)
    Dentifrices
        (bactericidal, chewable, for animal, oxidoreductase and enzyme
        substrate in)
    Hide substances
        (raw-, antimicrobial animal chewing foodstuff contg. oxidoreductase and
       peroxidase and enzyme substrates and, for inhibiting oral pathogens)
     Bakery products
        (biscuits, for animal, antimicrobial animal chewing foodstuff contq.
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KATHLEEN FULLER EIC1700 308-4290

oxidoreductase and peroxidase and enzyme substrates and, for inhibiting

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ΙT
     Food
        (dry, for animal, antimicrobial animal chewing foodstuff contg.
        oxidoreductase and peroxidase and enzyme substrates and, for inhibiting
        oral pathogens)
     9003-99-0, Lactoperoxidase
                                  9055-20-3, Chloroperoxidase
IT
     RL: BIOL (Biological study)
        (antimicrobial animal chewing foodstuff contg. oxidoreductase and
        enzyme substrates and, for inhibiting oral pathogens)
                                       540-72-7, Sodium thiocyanate
IT
     333-20-0, Potassium thiocyanate
     1762-95-4, Ammonium thiocyanate
                                       7647-14-5, Sodium chloride, biological
     studies
               7681-11-0, Potassium iodide, biological studies
     RL: BIOL (Biological study)
        (antimicrobial animal chewing foodstuff contg. oxidoreductase and
        peroxidase and, for inhibiting oral pathogens)
     50-99-7, D-Glucose, biological studies 51-67-2, Tyramine
IT
                                                                   59-23-4,
     d-Galactose, biological studies
                                       64-17-5, Ethanol, biological studies
     69-89-6, Xanthine 75-07-0, Acetaldehyde, biological studies
     Glycolic acid, biological studies
                                         79-33-4, L-Lactic acid, biological
               87-79-6, L-Sorbose
                                   95-55-6, 2-Aminophenol
     studies
                                                              110-60-1,
                        123-72-8, Butyraldehyde
                                                   154-17-6, 2-Deoxy-D-glucose
     1,4-Diaminobutane
     1783-96-6, D-Aspartic acid 6893-26-1, D-Glutamic acid 10516-09-3
                                              14474-04-5
                                                            22956-40-7
     13748-90-8, L-2-Hydroxyisocaproic acid
     32746-79-5
                  106623-56-7
     RL: BIOL (Biological study)
        (antimicrobial animal chewing foodstuff contg. oxidoreductase and, for
        inhibiting oral pathogens)
                                       9000-89-9, L-Amino acid oxidase
IT
     9000-88-8, D-Amino acid oxidase
                                  9001-53-0, Diamine oxidase
                                                               9001-66-5,
     9001-37-0, Glucose oxidase
     Monoamine oxidase 9028-71-1, Glycollate oxidase
                                                          9028-72-2, Lactate
               9028-78-8
                           9028-79-9, Galactose oxidase
                                                           9029-21-4,
     Pyridoxaminephosphate oxidase
                                      9029-38-3, Sulfite oxidase
     RL: BIOL (Biological study)
        (antimicrobial animal chewing foodstuff contg., for inhibiting oral
        pathogens)
L45
     ANSWER 17 OF 25 HCAPLUS COPYRIGHT 2001 ACS
                                                        DUPLICATE 11
ΑN
     1993:154193 HCAPLUS
DN
     118:154193
TΙ
     Antimicrobial dentifrice comprising oxidoreductase
     Montgomery, Robert E.
IN
PA
     USA
SO
     U.S., 9 pp.
     CODEN: USXXAM
DT
     Patent
LA
     English
IC
     ICM A61K007-16
     ICS A61K007-28
NCL
     424050000
     62-7 (Essential Oils and Cosmetics)
CC
FAN.CNT 1
                                           APPLICATION NO.
     PATENT NO.
                      KIND
                            DATE
                                                             DATE
                                            US 1991-797776
                      · A
                            19930105
                                                             19911125
PΙ
     US 5176899
                                            US 1992-931684
     US 5270033
                       Α
                            19931214
                                                             19920818
     US 5262151
                                           US 1992-934772
                            19931116
                                                             19920824
                       Α
                            19930610
                                           WO 1992-US10137 19921125
     WO 9310752
                       Αl
         W: AU, BR, CA, JP, KR, RU
         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                                           AU 1993-31471
                                                             19921125
     AU 9331471
                            19930628
                       Α1
                       B2
                            19970626
     AU 679169
     EP 614352
                       Α1
                            19940914
                                            EP 1992-925399
                                                             19921125
         R: AT, BE, CH, DE, DK, ES, FR, GB, IE, IT, LI, NL, SE
                            19950420
                       Т2
                                            JP 1992-510216
                                                             19921125
     JP 07503707
                       С
                                           CA 1992-2124336 19921125
     CA 2124336
                            19981117
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WO 1993-US7955

19930824

WO 9404127

Α1

19940303

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W: AU, CA, FI, JP, KR, NO, NZ RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                         Α1
                              19961211
                                               EP 1993-920301
                                                                 19930824
          R: BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE
PRAI US 1991-797776
                               19911125
     US 1992-934772
                               19920824
     WO 1992-US10137
                               19921125
     WO 1993-US7955
                              19930824
     Dentifrices comprise oxidoreductase and a substrate for H2O2
AB
     generation by this enzyme. The O content is limited, by manufg., storing,
     and packaging the dentifrice in the absence of O. The
     dentifrice optionally contains a peroxidase, which acts upon H202
     in order to oxidize salivary SCN- into antimicrobial OSCN-. A
     dentifrice was made of sorbitol (70% 25.000, glycerol 22.800,
water 17.521, CMC 7MXF 1.200, glucose 2.000, K3P04 0.177, K2HP04 0.254, K
benzoate 0.100, Sylodent-756 10.000, Sylodent-750 10.000, Sylodent-2
     10.000, TiO2 0.500, Pluronic P75 0.4000, and glucose oxidase (5000 U/mL)
     0.048 % by wt.
ST
     dentifrice microbicidal oxidoreductase; peroxidase microbicidal
     dentifrice
     Amino acids, biological studies
IT
     RL: BIOL (Biological study)
         (dentifrice contq. oxidoreductase and, microbicidal)
ΙT
     Thiocyanates
     RL: BIOL (Biological study)
         (dentifrice contq. peroxidase and, microbicidal)
ΙT
     Dentifrices
         (microbicidal, oxidoreductase-contg.)
     50-99-7, D-Glucose, biological studies
                                                51-67-2, Tyramine
                                                                       59-23-4,
     D-Galactose, biological studies 64-17-5, Ethanol, biological studies 69-89-6, Xanthine 75-07-0, Acetaldehyde, biological studies 79-14-
                           79-33-4, biological studies 87-79-6, L-Sorbose
     biological studies
                     nophenol 110-60-1, 1,4-Diaminobutane 123-72-8,
154-17-6, 2-Deoxy-D-glucose 1783-96-6, D-Aspartic acid
     95-55-6, 2-Aminophenol
     Butyraldehyde
     6893-26-1, D-Glutamic acid 10516-09-3 13748-90-8 14474-04-5
                                  28905-12-6, .beta.-D-Glucose
     22956-40-7
                   28060-84-6
                                                                   65209-08-7
     RL: BIOL (Biological study)
         (dentifrice contq. oxidoreductase and, microbicidal)
                                         540-72-7, Sodium thiocyanate
ΙT
     333-20-0, Potassium thiocyanate
     1762-95-4, Ammonium thiocyanate
     RL: BIOL (Biological study)
         (dentifrice contg. peroxidase and, microbicidal)
                                     9055-20-3, Chloroperoxidase
IT
     9003-99-0, Myeloperoxidase
     RL: BIOL (Biological study)
         (dentifrice contg., microbicidal)
                                         9000-89-9, L-Amino acid oxidase
IT
     9000-88-8, D-Amino acid oxidase
     9001-37-0, Glucose oxidase
                                    9001-53-0, Diamine oxidase
                                                                     9001-66-5,
     Monoamine oxidase 9002-17-9, Xanthine oxidase 9028-71-1, Glycolate
                9028-72-2, Lactate oxidase 9028-78-8
                                                            9028-79-9, Galactose
                                                9029-20-3, D-Aspartate oxidase
                9029-07-6, Aldehyde oxidase
     9029-21-4, Pyridoxamine phosphate oxidase 9037-63-2, L-2-Hydroxyacid
                9055-15-6, Oxidoreductase 62079-39-4, Sulfide oxidase
     oxidase
     RL: BIOL (Biological study)
         (dentifrices contg., microbicidal)
     ANSWER 18 OF 25 WPIDS COPYRIGHT 2001
                                               DERWENT INFORMATION LTD
L45
     1993-404878 [50]
ΑN
                          WPIDS
     1993-035683 [04]; 1993-377383 [47]
CR
     C1993-179873
DNC
     Antimicrobial compsn. prodn. - includes adding oxido-reductase substrate
ΤI
     for forming hydrogen peroxide to oxido-reductase carrier and limiting amt.
     of oxygen in antimicrobial compsn..
     A96 B04 D13 D16 D21 D22
DC
                               KATHLEEN FULLER EIC1700 308-4290
```

```
IN
     MONTGOMERY, R E
     (MONT-I) MONTGOMERY R E
PΑ
CYC
     1
PΙ
     US 5270033
                   A 19931214 (199350)*
                                               9p
                                                     A61K007-28
     US 5270033 A Cont of US 1991-797776 19911125, US 1992-931684 19920818
ADT
     US 5270033 A Cont of US 5176899
FDT
                      19911125; US 1992-931684
                                                 19920818
PRAI US 1991-797776
IC
     ICM A61K007-28
     ICS
          A61K037-50
          5270033 A UPAB: 19940203
AB
     US
     Method for making an antimicrobial compsn. comprises adding an
     oxidoreductase enzyme (I) and an oxidoreductase enzyme substrate (II) to a
     biologically acceptable carrier in a mixing chamber which is evacuated or
     filled with an inert gas to limit the O2 concn. in the compsn. to less
     than 3.2 ppm.
          (I) and (II) are present in amts. such that they react together to
     form H2O2 at a rate of 0.1-10 mM/min.. Also claimed is a compsn. with an
     enzyme-based antimicrobial system made by the above process, except that
     the H2O2 formation rate is at least 0.1 mM/min..
          USE - The method is esp. useful for making dental treatment
     compsns., topical or ophthalmic antimicrobial compsns., and cosmetic, food
     and pharmaceutical processing additives.
     Dwg.0/0
FS
     CPI
FΑ
     AB; DCN
MC
     CPI: A12-W11L; B04-B02C2; B07-A02; B12-A01; D03-H02E; D05-C03B; D08-B11
    ANSWER 19 OF 25 WPIDS COPYRIGHT 2001
                                             DERWENT INFORMATION LTD
L45
                        WPIDS
     1993-377383 [47]
ΑN
     1993-035683 [04]; 1993-404878 [50]
CR
DNC
    C1993-167572
     Antimicrobial, esp. dentifrice compsns. - which are capable of
TI
     activating or supplementing naturally occurring peroxidase systems.
DC
     A96 D16 D21
ΙN
     MONTGOMERY, R E
PΑ
     (MONT-I) MONTGOMERY R E
CYC
     25
                   A 19931116 (199347)*
                                               q8
                                                     A61K007-28
PΙ
     US 5262151
                   A1 19940303 (199410) EN
                                             29p
                                                     A61K007-28
     WO 9404127
        RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
         W: AU CA FI JP KR NO NZ
     AU 9350891
                   A 19940315 (199428)
                                                     A61K007-28
                   A1 19961211 (199703) EN
     EP 746303
                                                     A61K007-28
         R: BE CH DE DK ES FR GB IT LI NL SE
     EP 746303
                   A4 19970101 (199841)
                                                     A61K007-28
ADT
     US 5262151 A CIP of US 1991-797776 19911125, US 1992-934772 19920824; WO
     9404127 A1 WO 1993-US7955 19930824; AU 9350891 A AU 1993-50891 19930824;
     EP 746303 A1 EP 1993-920301 19930824, WO 1993-US7955 19930824; EP 746303
     A4 EP 1993-920301
     US 5262151 A CIP of US 5176899; AU 9350891 A Based on WO 9404127; EP
     746303 Al Based on WO 9404127
                      19920824; US 1992-934772
PRAI US 1992-934772
                                                 19920824
     US 3946108; US 4139665; US 4269822; US 4537764; US 4564519; US 4842846; US
     4996062; US 5144788; US 5176899; US 5217050; EP 277383; US 4578265
IC
     ICM A61K007-28
     ICS
          A61K037-50
AB
     US
          5262151 A UPAB: 19940203
     An anaerobically packaged compsn.(I) with an antimicrobial system
     comprises, (a) a fluid carrier comprising an oxidoreductive enzyme when
     reacted together, in the presence of O2. The H2O2 is formed at a rate of
     upto 100 micron moles/1/min., and (b) catalise in an amt. to reduce the
     amt. of H2O2 in the compsn.. The compsn. is packaged in an O2 impervious
     package and container.
          Also claimed is an antimicrobial dentifrice compsn.
```

FS

FΑ

MC

L45

AΝ

DC

TN

PΑ

PΙ

IC AB

FS

FA

L45

ΑN

DN

TΙ

IN

PA

SO

DT

LA

IC

NCL

FAN.CNT 4

PATENT NO.

KIND

DATE

CC

CYC

ADT

DNN TI

```
comprising the above compsn..
          USE/ADVANTAGE - The compsn. are capable of activating or
     supplementing naturally occuring peroxidase system, especially they are
     stable during preparation and after packing in environments which contain
    02. The aq. detifrice compsns. are stabilised against premature
     enzyme/substrate interacter by controlling the level of dissolved oxygen
     in the carrier. Opt. a peroxide enzyme may be included to act on the H2O2.
     Dwg.0/0
    CPI
    AΒ
    CPI: A12-V04B; D05-A01A4; D05-A01B1; D08-B08
    ANSWER 20 OF 25 WPIDS COPYRIGHT 2001
                                             DERWENT INFORMATION LTD
    1992-131191 [16]
                       WPIDS
    N1992-097874
    Insert teeth for material breaker machine - has insert
     tooth, mounted reversibly onto insert holder, with pair of edges
    either of which serves as cutting edge.
    P41
    MONTGOMERY, R C
     (MONT-N) MONTGOMERY IND INT
    1
    US 5100070
                  A 19920331 (199216)*
                                               6p
    US 5100070 A US 1990-542060 19900622
PRAI US 1990-542060
                     19900622
    B02C018-18
    US
          5100070 A UPAB: 19931006
    The insert tooth assembly includes an insert tooth
    member having a pair of edges, either of which may serve as a cutting
    edge. An insert tooth holder is provided for mounting of the
    insert tooth.
          The insert tooth and insert holder interengage through a
    raised portion on the one and a recessed portion on the other which mate
    to form a positive mechanical lock.
          The insert tooth is reversibly mounted in the insert holder
    to allow either of the pair of edges to assume the position of the cutting
    edge. The location of the interengaged components allows them to be fully
    protected from the material being cut thus minimising wear and damage.
    The insert tooth is inclined at an angle w.r.t. the insert
    holder, thus providing relief against back-up of material being processed
    and allowing the material to feed more quickly.
          USE - For a material breaker machine intended for use in reducing
    chunks or pieces of wood, metal and other materials to small size. (1/6)
    1/6
    GMPI
    AB; GI
    ANSWER 21 OF 25 HCAPLUS COPYRIGHT 2001 ACS
    1986:213034 HCAPLUS
    104:213034
    Di-enzymatic chewable dentifrice
    Pellico, Michael A.; Montgomery, Robert E.
    Laclede Professional Products, Inc., USA
    U.S., 7 pp. Cont.-in-part of U.S. 4,537,764.
    CODEN: USXXAM
     Patent
    English
    ICM A61K009-68
         A61K007-28; A61K037-50
     ICS
     424048000
     62-7 (Essential Oils and Cosmetics)
```

KATHLEEN FULLER EIC1700 308-4290

APPLICATION NO.

```
PI
     US 4564519
                       Α
                             19860114
                                            US 1983-559474
                                                              19831208
     US 4578265
                       Α
                             19860325
                                            US 1981-292633
                                                              19810813
     US 4537764
                       Α
                             19850827
                                            US 1983-501383
                                                              19830606
     EP 133736
                       A2
                             19850306
                                            EP 1984-302162
                                                              19840329
     EP 133736
                       A3
                             19860205
                             19891213
     EP 133736
                       В1
            CH, DE, FR, GB, IT, LI, NL
         R:
                             19841225
     JP 59231011
                       A2
                                            JP 1984-105635
                                                              19840523
     JP 04025924
                             19920506
                       B4
PRAI US 1981-292633
                             19810813
     US 1983-501383
                             19830606
     US 1983-559474
                             19831208
     A chewable dentifrice having antibacterial activity contains an
AB
     oxidizable substrate 0.015-0.6 mmol, an oxidoreductase 0.5-500 IU (for
     \mbox{H2O2} formation on chewing), a thiocyanate salt 0.001-0.01 mmol, and
     lactoperoxidase 0.01-50 IU such that the lactoperoxidase is present
     .gtoreq.2% (IU) of the oxidoreductase. The lactoperoxidase is present to
     form an antibacterial hypothiocyanate from the H2O2 and thiocyanate.
     Thus, a compn. contg. cryst. sorbitol 75, gum base 23, color 0.5, flavor
     1.0, .beta.-D-glucose 0.5, K thiocyanate 0.01, glucose oxidase (100,000
     IU/g) 0.006, and lactoperoxidase (100,000 IU/g) 0.0006 g was made into 3 g
              When chewed, this compn. had 96-99% effectiveness as a bacterial
     sticks.
     inhibitor.
ST
     enzyme dentifrice chewable antiseptic; gum chewing
     dentifrice enzyme; oxidoreductase lactoperoxidase chewable
     dentifrice; hypothiocyanate dentifrice
TT
     Thiocyanates
     RL: BIOL (Biological study)
        (dentifrice contg. lactoperoxidase and in-situ generated
        hydrogen peroxide and, bactericidal chewable)
TT
    Dentifrices
        (chewing gums, bactericidal, contg. enzymes for hypothiocyanate in-situ
        generation)
TT
     Amino acids, biological studies
     RL: BIOL (Biological study)
        (D-, dentifrice contg. D-amino acid oxidase and, bactericidal
        chewable)
IT
     62-49-7
     RL: BIOL (Biological study)
        (dentifrice contg. choline oxidase and, bactericidal
        chewable)
IT
     59-23-4, biological studies
     RL: BIOL (Biological study)
        (dentifrice contg. galactose oxidase and, bactericidal
        chewable)
     492-61-5
IT
     RL: BIOL (Biological study)
        (dentifrice contg. glucose oxidase and, bactericidal
        chewable)
IT
     56-40-6, biological studies
     RL: BIOL (Biological study)
        (dentifrice contg. glycine oxidase and, bactericidal
        chewable)
IT
     333-20-0
                540-72-7
                           1762-95-4
     RL: BIOL (Biological study)
        (dentifrice contg. lactoperoxidase and in-situ generated
        hydrogen peroxide and, bactericidal chewable)
ΙT
     9000-88-8
                 9001-37-0
                              9002-12-4
                                          9028-67-5
                                                      9028-79-9
                                                                   37255-41-7
     39307-16-9
     RL: BIOL (Biological study)
        (dentifrice contq. lactoperoxidase and, bactericidal
        chewable)
ΙT
     3416-24-8
                 7512-17-6
     RL: BIOL (Biological study)
```

```
(dentifrice contg. oxidoreductase and lactoperoxidase and,
        bactericidal chewable)
                             64296-33-9
IT
     134-03-2
                15421-15-5
     RL: BIOL (Biological study)
        (dentifrice contg. oxidoreductase and, as catalase inhibitor)
IT
     9003-99-0
     RL: BIOL (Biological study)
        (dentifrice contg. thiocyanate and in-situ generated hydrogen
        peroxide and, bactericidal chewable)
TΨ
     69-93-2, uses and miscellaneous
     RL: USES (Uses)
        (dentifrice contg. urate oxidase and, bactericidal chewable)
     319-78-8 338-69-2
ΙT
                         344-25-2 348-67-4
                                                640-68-6 673-06-3
     RL: BIOL (Biological study)
        (dentifrice contg. D-amino acid oxidase and, bactericidal
        chewable)
ΙT
     6893-26-1
     RL: BIOL (Biological study)
        (dentifrice contg. D-glutamate oxidase and, bactericidal
        chewable)
     7722-84-1P, preparation
TT
     RL: FORM (Formation, nonpreparative); PREP (Preparation)
        (formation of, in-situ, in dentifrice contg. thiocycanate and
        lactoperoxidase)
    ANSWER 22 OF 25 HCAPLUS COPYRIGHT 2001 ACS
T.45
ΑN
     1986:39537 HCAPLUS
DN
     104:39537
ΤI
     Stabilized enzymic dentifrice containing .beta.-D-glucose and
     glucose oxidase
ΙN
     Pellico, Michael A.; Montgomery, Robert E.
PΑ
     Laclede Professional Products, Inc., USA
     U.S., 6 pp. Cont.-in-part of U.S. Ser. No. 292,633, abandoned.
SO
     CODEN: USXXAM
DT
     Patent
LA
     English
IC
     ICM A61K007-28
     TCS
         A61K037-48; A61K037-50
NCL
     424050000
CC
     62-7 (Essential Oils and Cosmetics)
FAN.CNT 4
     PATENT NO.
                      KIND
                            DATE
                                            APPLICATION NO.
                                                             DATE
     US 4537764
                            19850827
                                            US 1983-501383
                       Α
                                                             19830606
     US 4578265
                      Α
                            19860325
                                            US 1981-292633
                                                             19810813
                                            US 1983-559474
     US 4564519
                       Α
                            19860114
                                                             19831208
     EP 133736
                       Α2
                            19850306
                                            EP 1984-302162
                                                             19840329
     EP 133736
                       Α3
                            19860205
     EP 133736
                      В1
                            19891213
         R: CH, DE, FR, GB, IT, LI, NL
                       A2
                            19841225
                                            JP 1984-105635
                                                             19840523
     JP 59231011
     JP 04025924
                       B4
                            19920506
     JP 62213754
                       A2
                            19870919
                                            JP 1986-58018
                                                             19860314
PRAI US 1981-292633
                            19810813
     US 1983-501383
                            19830606
     US 1983-559474
                            19831208
AB
     An enzymic dentifrice for producing H2O2 upon oral application,
     and limiting any water present in the dentifrice to no more than
     10 wt.% of the dentifrice wt. to stabilize the
     dentifrice against prodn. of H2O2 prior to application, comprises
     .beta.-D-glucose at 0.015-0.6 mmol and glucose oxidase at 0.5-500 IU.
     Thus, a formulation contained glycerin (99%) 50, Co pyrophosphate 40,
     NaHCO3 5, color 0.5, flavor 0.5, .beta.-D-glucose (0.03 mmol) 0.5, glucose
     oxidase (100,000 IU/g) 0.1, Triton X-100 0.4, and H2O 3 g. The
                             KATHLEEN FULLER EIC1700 308-4290
```

```
dentifrice has a 400% improvement in package stability compared to
     a com. formulation.
     dentifrice antiseptic glucose glucose oxidase; enzymic
ST
     dentifrice glucose
IT
     Dentifrices
        (enzymic, contg. glucose and glucose oxidase)
ΙT
     9001-37-0
     RL: BIOL (Biological study)
        (dentifrice contg. glucose and)
IT
     28905-12-6
     RL: BIOL (Biological study)
        (dentifrice contg. glucose oxidase and)
     ANSWER 23 OF 25 WPIDS COPYRIGHT 2001
                                              DERWENT INFORMATION LTD
L45
AN
     1985-088321 [15]
                        WPIDS
DNC C1985-038324
TΙ
     Di-enzymatic dentifrice producing hypo-thiocyanate bacterial
     inhibitor - comprises oxidisable substrate, oxido reductase enzyme,
     thiocyanate salt and lacto peroxidase.
DC
     B04 B05 D21
ΙN
     MONTGOMERY, R E; PELLICO, M A
     (LACL-N) LACLEDE PROFESSIONAL PROD
PA
CYC
     9
PΙ
     EP 133736
                   Α
                      19850306 (198515) * EN
                                               35p
         R: CH DE FR GB IT LI NL
     JP 59231011
                   Α
                      19841225 (198506)
                      19850827 (198537)
     US 4537764
                   Α
     US 4564519
                   Α
                      19860114 (198605)
     EP 133736
                   В
                      19891213 (198950)
         R: CH DE FR GB IT LI NL
     DE 3480691
                   G
                      19900118 (199004)
                   В
                      19920506 (199222)
                                                      A61K007-28
     JP 04025924
                                               14p
ADT
     EP 133736 A EP 1984-302162 19840329; US 4537764 A US 1983-501383 19830606;
     US 4564519 A US 1983-559474 19831208; JP 04025924 B JP 1984-105635
     19840523
FDT
     JP 04025924 B Based on JP 59231011
PRAI US 1981-292633
                      19810813; US 1983-501383
                                                  19830606; US 1983-559474
     19831208
REP
     1.Jnl.Ref; A3...8606; No-SR.Pub; US 4150113
         A61K007-28
IC
     ICM
     ICS
          A61K009-68; A61K037-48
AB
           133736 A UPAB: 19930925
     Di-enzymatic dentifrice comprises, per g, 0.015-0.6 millimole of
     oxidisable substrate (OS) and 0.5-500 international units of
     oxidoreductase (OR) enzyme specific to OS, with 0.0001-0.01 millimole
     thiocyanate salt (TS) and 0.01-50 IU lactoperoxidase (LP) in amt. at least
     2% (inIU) of amt. of OR.
          H2O2 is produced by the action of OR on OS, and intracts with TS and
     LP to produce a hypothiocyanate bacterial inhibitor.
          USE/ADVANTAGE - The dentifrice may be e.g. a powder, paste,
     cream, liq. chewing gum, chewable tablet, lozenge or floss, and does not
     depent on the naturally occurring, oral concn. of glucose, potassium
     thiocyanate or lactoperoxidase for antibacterial effectiveness
     0/0
     CPI
FS
FA
     AB
     CPI: B04-A06; B04-B02C2; B05-C03; B07-D03; B10-A07; B10-A22; B10-B02J;
MC
          B10-B04B; B12-A01; B12-L03; D08-B08
     ANSWER 24 OF 25 HCAPLUS COPYRIGHT 2001 ACS
                                                        DUPLICATE 12
L45
     1984:536819 HCAPLUS
AN
DN
     101:136819
ΤI
     Dienzymic dentifrice
IN
     Pellico, Michael A.; Montgomery, Robert E.
                              KATHLEEN FULLER EIC1700 308-4290
```

```
Laclede Professional Products, Inc., USA
PA
SO
     Can., 26 pp.
     CODEN: CAXXA4
DT
     Patent
LA
     English
IC
     A61K007-28
     62-7 (Essential Oils and Cosmetics)
CC
FAN.CNT 4
     PATENT NO.
                      KIND
                            DATE
                                           APPLICATION NO.
                                                            DATE
                            _____
                                           _____
PΙ
     CA 1167381
                      A1
                            19840515
                                           CA 1981-392173
                                                            19811214
                                           US 1981-292633
     US 4578265
                      Α
                            19860325
                                                            19810813
     JP 62213754
                     A2
                            19870919
                                           JP 1986-58018
                                                            19860314
PRAI US 1981-292633
                            19810813
     A dienzymic dentifrice compn. contains 0.015-0.6 mmol oxidizable
     substrate such as .beta.-D-glucose [492-61-5] and 0.5-500 IU of an
     oxidoreductase enzyme specific to each substrate for H2O2 prodn. on oral
     application of the dentifrice. In addn., the compn. contains
     0.0001-0.01 mmol of a thiocyanate salt and 0.05-20 IU lactoperoxidase
     [9003-99-0] for interaction with H2O2 to produce a hypothiocyanate
     bacterial inhibitor. Thus, a toothpaste was prepd. contg.
     glycerin 48, propylene glycol 5, NaHCO3 1.9, Silcron G-910 35, water 2,
     dioctyl Na sulfosuccinate 2, glucose oxidase [9001-37-0] 0.125 (12,500
    IU), .beta.-D-glucose 5, lactoperoxidase (100,000 IU/g) 0.0001, KCNS 0.01,
     color 0.5 and flavor 0.5 q. The effectiveness of the dentifrice
     was demonstrated in humans.
ST
     enzymic dentifrice; oxidizable enzyme substrate
     dentifrice; thiocyanate enzyme dentifrice
IT
     Enzymes
     RL: BIOL (Biological study)
        (dentifrices contg. oxidizable substrates and)
IT
    Dentifrices
        (enzymes and oxidizable substrates for)
IT
     Amino acids, biological studies
     RL: BIOL (Biological study)
        (D-, dienzymic dentifrices contq.)
IT
     338-69-2
               344-25-2 348-67-4
                                     492-61-5
                                                 640-68-6
                                                            673-06-3
                56-40-6, uses and miscellaneous 59-23-4, biological studies
     6893-26-1
     62-49-7 · 69-93-2, biological studies 319-78-8
     RL: BIOL (Biological study)
        (dienzymic dentifrices contg.)
ΙT
     333-20-0
               540-72-7
                           1762-95-4
                                       3416-24-8
                                                   7512-17-6
                                                               9001-37-0
     9002-12-4
                 9003-99-0
                             9028-67-5
                                         9028-79-9
                                                     37255-41-7
                                                                  39307-16-9
     RL: BIOL (Biological study)
        (dienzymic dentifrices contg. oxidizable substrates and)
L45
    ANSWER 25 OF 25 HCAPLUS COPYRIGHT 2001 ACS
                                                       DUPLICATE 13
ΑN
     1981:449446 HCAPLUS
DN
     95:49446
TΙ
     Antiseptic dentifrice
     Pellico, Michael A.; Montgomery, Robert E.
IN
     Laclede Professional Products, Inc., USA
PA
SO
     U.S., 5 pp. Cont.-in-part of U.S. Ser. No. 59,243, abandoned.
     CODEN: USXXAM
DT
     Patent
LA
     English
IC
     A61K007-22; A61K007-28; A61K037-50; A61K031-195
NCL
     424050000
     63-6 (Pharmaceuticals)
     Section cross-reference(s): 62
FAN.CNT 1
                      KIND DATE
     PATENT NO.
                            19810526
                       Α
                                           US 1980-182384
                                                            19800829
     US 4269822
PI
                             KATHLEEN FULLER EIC1700 308-4290
```

19790720 PRAI US 1979-59243 An antiseptic dentifrice contains 0.01-0.5 wt. % oxidizable amino acid substrate and 50-1000 IU oxidoreductase enzyme specific to the substrate which produces NH3 and H2O2 upon oral application of the dentifrice. Nonaq. fluid carriers and limited H2O content protect against NH3 and H2O2 prodn. prior to application. An antiseptic toothpaste was prepd. contg. glycerol [56-81-5] 500, Ca pyrophosphate 400, H2O 25, NaHCO3 50, Super-Pro 20, glycine [56-40-6] 0.5 g, glycine oxidase [39307-16-9] 5000 IU, coloring agent 51, flavoring agent 5 g. ST dentifrice antiseptic; amino acid oxidase dentifrice Amino acids, biological studies IT RL: BIOL (Biological study) (antiseptic dentifrices contg. oxidoreductase enzyme and) IT Dentifrices (antiseptic, amino acids and oxidoreductase enzyme in) TT Enzymes RL: BIOL (Biological study) (oxidoreductase, antiseptic dentifrices contg. amino acids and) IT 56-40-6, biological studies 60-18-4, biological studies 61 - 90 - 5, biological studies 63-68-3, biological studies 63-91-2, biological 71-00-1, biological studies 73-22-3, biological studies 73-32-5, biological studies 319-78-8 327-57-1 338-69-2 344-25-2 673-06-3 1492-24-6 348-67-4 372-75-8 640-68-6 6600-40-4 RL: BIOL (Biological study) (antiseptic dentifrices contg. amino acid oxidase and) 57-55-6, biological studies IT 56-81-5, biological studies RL: BIOL (Biological study) (antiseptic dentifrices contg. amino acids and oxidoreductase enzymes and) IT 39307-16-9 RL: BIOL (Biological study) (antiseptic dentifrices contg. glycine and) IT 9000-88-8 RL: BIOL (Biological study) (antiseptic dentifrices contg. D-amino acids and) 9000-89-9 IT RL: BIOL (Biological study) (antiseptic dentifrices contg. L-amino acids and)

=> file reg

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STRUCTURE FILE UPDATES: 28 MAY 2001 HIGHEST RN 338729-10-5 DICTIONARY FILE UPDATES: 28 MAY 2001 HIGHEST RN .338729-10-5

TSCA INFORMATION NOW CURRENT THROUGH January 11, 2001

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Structure search limits have been increased. See HELP SLIMIT for details.

=> d 149 1-3

L49 ANSWER 1 OF 3 REGISTRY COPYRIGHT 2001 ACS
KATHLEEN FULLER EIC1700 308-4290

```
26446-35-5 REGISTRY
RN
      1,2,3-Propanetriol, monoacetate (9CI)
CN
OTHER CA INDEX NAMES:
CN
      Acetin, mono- (6CI, 7CI, 8CI)
OTHER NAMES:
      Acetin
CN
CN
      Acetoglyceride
CN
      Acetyl monoglyceride
CN
      Glycerin monoacetate
CN
      Glycerine monoacetate
CN
      Glycerol acetate
CN
      Glycerol monoacetate
CN
      Glyceryl acetate
CN
     Glyceryl monoacetate
CN.
     Monoacetin
   - 1335-38-2
- DR
      C5 H10 O4
MF
CI
      IDS, COM
LC
                    AGRICOLA, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS, CASREACT,
      STN Files:
      CBNB, CHEMCATS, CHEMLIST, CSCHEM, DDFU, DETHERM*, DRUGU, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, IMSDIRECTORY, IPA, MEDLINE, MRCK*, NIOSHTIC, PROMT, RTECS*, TOXLINE, TOXLIT, TULSA, USPATFULL
          (*File contains numerically searchable property data)
      Other Sources: DSL**, EINECS**, TSCA**
          (**Enter CHEMLIST File for up-to-date regulatory information)
      CM
      CRN
          64-19-7
      CMF
          C2 H4 O2
HO-C-CH3
      CM
      CRN
           56-81-5
      CMF
           C3 H8 O3
         OH
HO-CH2--CH--CH2--OH
               236 REFERENCES IN FILE CA (1967 TO DATE)
                 9 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
               236 REFERENCES IN FILE CAPLUS (1967 TO DATE)
                23 REFERENCES IN FILE CAOLD (PRIOR TO 1967)
     ANSWER 2 OF 3 REGISTRY COPYRIGHT 2001 ACS
L49
      25395-31-7 REGISTRY
RN
      1,2,3-Propanetriol, diacetate (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
      Acetin, di- (6CI, 7CI, 8CI)
OTHER NAMES:
CN
      Diacetin
CN
      Diacetylglycerol
CN
      Estol 1582
CN
      Estol 1583
```

```
CN
     Glycerin diacetate
CN
     Glycerine diacetate
CN
     Glycerol diacetate
CN
     Glyceryl diacetate
DR
     1300-63-6, 29860-16-0
MF
     C7 H12 O5
     IDS, COM
CI
LC
                  AGRICOLA, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS,
     STN Files:
       CASREACT, CHEMCATS, CHEMLIST, CSCHEM, DDFU, DETHERM*, DRUGU, EMBASE,
       HODOC*, IFICDB, IFIPAT, IFIUDB, IPA, MRCK*, RTECS*, SPECINFO, TOXLINE,
       TOXLIT, USPATFULL
         (*File contains numerically searchable property data)
                      DSL**, EINECS**, TSCA**
     Other Sources:
         (**Enter CHEMLIST File for up-to-date regulatory information)
     CM 1_
     CRN
          64-19-7
     CMF
          C2 H4 O2
но-с-снз
     CM
     CRN
          56-81-5
     CMF
         C3 H8 O3
        OH
HO-CH2--CH-CH2-OH
             266 REFERENCES IN FILE CA (1967 TO DATE)
              10 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
             266 REFERENCES IN FILE CAPLUS (1967 TO DATE)
              25 REFERENCES IN FILE CAOLD (PRIOR TO 1967)
     ANSWER 3 OF 3 REGISTRY COPYRIGHT 2001 ACS
L49
RN
     102-76-1 REGISTRY
     1,2,3-Propanetriol, triacetate (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
     Acetin, tri- (6CI, 8CI)
OTHER NAMES:
CN
     1,2,3-Triacetoxypropane
CN
     Enzactin
CN
     Estol 1581
CN
     Fungacetin
CN
     Glycerin triacetate
CN
     Glycerol triacetate
CN
     Glyceryl triacetate
CN
     Glyped:
CN
     Kesscoflex TRA
CN
     Priacetin 1580
     Priacetin 1581
CN
     Triacetin
CN
CN
     Triacetine
CN
     Triacetylglycerin
CN
     Triacetylglycerol
```

```
CN Ujostabil
CN Vanay
FS 3D CONCORD
MF C9 H14 06
CI COM
```

LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CHEMSAFE, CIN, CSCHEM, DDFU, DETHERM*, DIOGENES, DIPPR*, DRUGU, EMBASE, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, SPECINFO, TOXLINE, TOXLIT, TULSA, USAN, USPATFULL, VTB

(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**, WHO

(**Enter CHEMLIST File for up-to-date regulatory information)

OAc | AcO-CH₂-CH-CH₂-OAc

1892 REFERENCES IN FILE CA (1967 TO DATE)
12 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1895 REFERENCES IN FILE CAPLUS (1967 TO DATE)
104 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> file hcaplus

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=> d que 167

```
L7 7 SEA FILE=REGISTRY ABB=ON HYDROGEN PEROXIDE/CN OR CARBAMIDE PEROXIDE/CN OR SODIUM PERBORATE/CN OR SODIUM PERCARBONATE/CN
L12 140072 SEA FILE=HCAPLUS ABB=ON L7 OR HYDROGEN PEROXIDE OR H2O2 OR CARBAMIDE PEROXIDE OR SODIUM PERBORATE OR SODIUM PERCARBONATE
L46 1 SEA FILE=REGISTRY ABB=ON "GLYCERYL TRIACETATE"/CN
L47 1 SEA FILE=REGISTRY ABB=ON "GLYCERYL DIACETATE"/CN
KATHLEEN FULLER EIC1700 308-4290
```

```
1 SEA FILE=REGISTRY ABB=ON "GLYCERYL ACETATE"/CN
L48
              3 SEA FILE=REGISTRY ABB=ON (L46 OR L47 OR L48)
L49
              6 SEA FILE=REGISTRY ABB=ON CARBAMIDE PEROXIDE/CN OR SODIUM
L53
                PERCARBONATE/CN OR SODIUM PERBORATE/CN
           258 SEA FILE=REGISTRY ABB=ON 9003-39-8/CRN
L55
              3 SEA FILE=REGISTRY ABB=ON L55 AND HYDROGEN PEROXIDE
L56
           2189 SEA FILE=HCAPLUS ABB=ON L49 OR GLYCERYL(W)?ACETATE?
L57
           3590 SEA FILE=HCAPLUS ABB=ON L53 OR L56
L58
             45 SEA FILE=HCAPLUS ABB=ON L57 AND (L58 OR L12 OR (SODIUM OR
L60
                CALCIUM OR MAGNESIUM) (W) PEROXIDE)
L61
              2 SEA FILE=HCAPLUS ABB=ON L60 AND (DENT? OR TOOTH? OR TEETH?)
             21 SEA FILE=HCAPLUS ABB=ON L60 AND (BLEACH? OR WHIT? OR STAIN? (3A
L62
                ) REMOV?)
L63
             51 SEA FILE=HCAPLUS ABB≒ON L57 AND ?PEROX?
             18 SEA FILE=HCAPLUS ABB=ON L63 AND (BLEACH? OR WHIT? OR STAIN? (3A
L64
                ) REMOV?)
              3 SEA FILE-HCAPLUS ABB=ON L63 AND (DENT? OR TOOTH? OR TEETH?)
L65
             10 SEA FILE=HCAPLUS ABB=ON L63 AND PEROXY?(2W)ACID#
L66
             28 SEA FILE=HCAPLUS ABB=ON L61 OR L62 OR L64 OR L65 OR L66
L67
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=> file wpids

FILE 'WPIDS' ENTERED AT 11:41:13 ON 29 MAY 2001 COPYRIGHT (C) 2001 DERWENT INFORMATION LTD

FILE LAST UPDATED: 28 MAY 2001 <20010528/UP>

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=> d que 168

L7	. 7	SEA FILE=REGISTRY ABB=ON HYDROGEN PEROXIDE/CN OR CARBAMIDE PEROXIDE/CN OR SODIUM PERBORATE/CN OR SODIUM PERCARBONATE/CN
L12	140072	SEA FILE=HCAPLUS ABB=ON L7 OR HYDROGEN PEROXIDE OR H2O2 OR CARBAMIDE PEROXIDE OR SODIUM PERBORATE OR SODIUM PERCARBONATE
L46	1	SEA FILE=REGISTRY ABB=ON "GLYCERYL TRIACETATE"/CN
L47	1	SEA FILE=REGISTRY ABB=ON "GLYCERYL DIACETATE"/CN
L48	1	SEA FILE=REGISTRY ABB=ON "GLYCERYL ACETATE"/CN
L49	3	SEA FILE=REGISTRY ABB=ON (L46 OR L47 OR L48)
L53	6	SEA FILE=REGISTRY ABB=ON CARBAMIDE PEROXIDE/CN OR SODIUM
		PERCARBONATE/CN OR SODIUM PERBORATE/CN
L55	258	SEA FILE=REGISTRY ABB=ON 9003-39-8/CRN
L56	3	SEA FILE=REGISTRY ABB=ON L55 AND HYDROGEN PEROXIDE
L57	2189	SEA FILE=HCAPLUS ABB=ON L49 OR GLYCERYL(W)?ACETATE?
L58	3590	SEA FILE=HCAPLUS ABB=ON L53 OR L56
L60	45	SEA FILE=HCAPLUS ABB=ON L57 AND (L58 OR L12 OR (SODIUM OR
		CALCIUM OR MAGNESIUM) (W) PEROXIDE)
L61	2	SEA FILE=HCAPLUS ABB=ON L60 AND (DENT? OR TOOTH? OR TEETH?)
L62	21	SEA FILE=HCAPLUS ABB=ON L60 AND (BLEACH? OR WHIT? OR STAIN?(3A) REMOV?)

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51 SEA FILE=HCAPLUS ABB=ON L57 AND ?PEROX?
L63
             18 SEA FILE=HCAPLUS ABB=ON
                                           L63 AND (BLEACH? OR WHIT? OR STAIN? (3A
L64
                 ) REMOV?)
L65
              3 SEA FILE=HCAPLUS ABB=ON
                                           L63 AND (DENT? OR TOOTH? OR TEETH?)
              10 SEA FILE=HCAPLUS ABB=ON L63 AND PEROXY?(2W)ACID#
L66
              2 SEA FILE-WPIDS ABB-ON L61 OR L62 OR L64 OR L65 OR L66
L68
=> dupr rem 167 168
DUPR IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
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"HELP COMMANDS" at an arrow prompt (=>).
=> dup rem 167 168
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PROCESSING COMPLETED FOR L67
PROCESSING COMPLETED FOR L68
             29 DUP REM L67 L68 (1 DUPLICATE REMOVED)
L69
=> d 169 all 1-29 hitstr
     ANSWER 1 OF 29 HCAPLUS
                               COPYRIGHT 2001 ACS
L69
     2001:320052
                  HCAPLUS
ΑN
     134:312845
DN
     Compositions for treating shoes and methods and articles employing same
TI
     Baker, Keith Homer; Siklosi, Michael P.; Na, Henry Cheng; Strang, Janine Morgens; Haeggberg, Donna Jean; Scheper, William Michael; Sheets, Connie
IN
     Lynn; Tollens, Fernando Ray; Murray, Michael Glen; Creedon, Michael
     Timothy; Wahl, Errol Hoffman; Trinh, Toan; Sadlowski, Eugene Steven;
     Becks, Vincent J.
     Procter + Gamble Co., USA PCT Int. Appl., 172 pp.
PA
SO
     CODEN: PIXXD2
DT
     Patent
LA
     English
IC
     ICM C11D003-37
         C11D001-72
     46-5 (Surface Active Agents and Detergents)
CC
FAN.CNT 1
     PATENT NO.
                       KIND
                             DATE
                                             APPLICATION NO.
     ______
                             20010503
                                             WO 2000-US29236 20001020
PT
     WO 2001030955
                        Α1
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU,
             ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
             CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRAI US 1999-161118
                             19991022
                       Ρ
     US 1999-161151
                        Ρ
                             19991022
```

US 1999-161187

Ρ

19991022

```
US 1999-161240
                       P
                            19991022
     US 2000-198019
                       Ρ
                            20000418
     US 2000-198507
                       P
                            20000418
                       P
                            20000505
     US 2000-202291
AΒ
     The present invention relates to compns. for treating shoes, esp.
     leather-contg. shoes, such as athletic shoes, and methods and articles of
     manuf. employing same to treat the shoes prior to and/or during and/or
     after washing the shoes. More particularly, the present invention relates
     to compns. applied to one or more shoes in need of treatment prior to
     and/or during and/or after washing the shoes for imparting a desired
     benefit to the shoes such as cleaning and/or conditioning and/or
     disinfecting and/or deodorizing. A method for treating one or more shoes
     comprising contacting the one or more shoes directly or indirectly with
     one or more treating compns. according to any of the preceding claims.
    method of imparting one or more desired benefits to a shoe comprising
    _applying an effective amt. of one or more benefit agents provided by using
     the title treating compn. with or without a washing process. Thus,
     cleaning agent-contg. treating compn. can be formulated as follows :
     acrylic acid-maleic acid copolymer 26.2; nonionic surfactant 12.6, Tween
     20 12.6, Na Citrate 1.7, NaOH 0.8, silicone suds suppresser 0.3, minors
     (dye, perfume, preservative) 2, fluorescent whitening agent 0.2,
     and water 43.5.
     shoe treating compn benefit cleaning conditioning disinfecting deodorizing
ST
     waterproofing
     Polysiloxanes, uses
IΤ
    RL: PRP (Properties); TEM (Technical or engineered material use); USES
     (Uses)
        (CM 2233; compns. and methods for treating shoes)
ΙT
     Alcohols, uses
     RL: PRP (Properties); TEM (Technical or engineered material use); USES
     (Uses)
        (C12-13, ethoxylated, Neodol 23-6.5, Neodol 23-9, nonionic surfactant;
        compns. and methods for treating shoes)
TΤ
     Fatty acids, uses
     RL: PRP (Properties); TEM (Technical or engineered material use); USES
        (C8-10; compns. and methods for treating shoes)
IT
     Brightening
        (agents; compns. and methods for treating shoes)
ΤТ
     Polyoxyalkylenes, uses
     RL: PRP (Properties); TEM (Technical or engineered material use); USES
        (alkyl ether; compns. and methods for treating shoes)
ΙT
     Quaternary ammonium compounds, uses
     RL: PRP (Properties); TEM (Technical or engineered material use); USES
        (alkylbenzyldimethyl, chlorides, disinfecting agent; compns. and
       methods for treating shoes)
IT
     Surfactants
        (amphiphilic; compns. and methods for treating shoes)
IT
     Surfactants
        (anionic; compns. and methods for treating shoes)
IT
     Surfactants
        (cationic; compns. and methods for treating shoes)
IT
     Antibacterial agents
    Antimicrobial agents
     Deodorants
     Detergents
     Disinfectants
     Fungicides
     Leather
     Leather substitutes
     Perfumes
```

Shoes

```
Thickening agents
    Waterproofing agents
        (compns. and methods for treating shoes)
ΙT
    Enzymes, uses
    Fluoropolymers, uses
     Lecithins
     Polyoxyalkylenes, uses
    Quaternary ammonium compounds, uses
    RL: PRP (Properties); TEM (Technical or engineered material use); USES
     (Uses)
        (compns. and methods for treating shoes)
IT
    Polyamides, uses
    RL: TEM (Technical or engineered material use); USES (Uses)
        (compns. and methods for treating shoes)
ΙT
    Polysiloxanes, uses
    RL: PRP (Properties); TEM (Technical or engineered material use); USES
        (di-Me, hydroxyalkyl Me, ethers with polyalkylene glycol
       mono-C1-3-alkyl ether, Silwet L 7500; compns. and methods for treating
        shoes)
IT
     Surfactants
        (nonionic; compns. and methods for treating shoes)
TΤ
    Canvas
    Sporting goods
        (shoes; compns. and methods for treating shoes)
IT
        (sport; compns. and methods for treating shoes)
IT
    Polyesters, uses
    RL: PRP (Properties); TEM (Technical or engineered material use); USES
        (sucrose; compns. and methods for treating shoes)
IT
     Surfactants
        (zwitterionic; compns. and methods for treating shoes)
     335373-44-9, Na C25AE1.8S
TT
    RL: PRP (Properties); TEM (Technical or engineered material use); USES
     (Uses)
        (Na C25AE1.8S; compns. and methods for treating shoes)
IT
     335317-85-6
    RL: PRP (Properties); TEM (Technical or engineered material use); USES
     (Uses)
        (bleach activator; compns. and methods for treating shoes)
ΙT
     56-81-5, Glycerin, uses 56-84-8D, Aspartic acid, esters, polymers
    57-50-1D, Sucrose, polyester 67-63-0, Isopropanol, uses
                                                                 79-10-7D,
    Acrylic acid, esters, polymers 79-14-1D, Glycolic acid, esters, polymers
    91-64-5D, Coumarin, derivs. 98-11-3D, Benzenesulfonic acid, linear alkyl
    derivs., sodium salt 102-76-1, Triacetin 112-05-0, Nonanoic
           139-44-6, Trihydroxystearin
                                          334-48-5, Decanoic acid
                                                                     497-19-8,
                              994-36-5, Sodium Citrate 1300-72-7, Sodium
    Sodium carbonate, uses
                        1310-73-2, Sodium Hydroxide, uses
                                                            7722-88-5, Sodium
    xylene sulfonate
                    7757-82-6, Sodium sulfate, uses
                                                     7758-29-4, Sodium
    pyrophosphate
                        9001-92-7, Protease
                                              9003-04-7, Acusol 445N
     tripolyphosphate
                                        9005-64-5, Tween 20
     9004-32-4, Carboxymethyl cellulose
                                                                9012-54-8,
                9016-00-6, Poly[oxy(dimethylsilylene)]
                                                          25322-68-3, PEG
    25322-68-3D, Polyethylene glycol, alkyl ether 31900-57-9,
    Dimethylsilanediol, homopolymer
                                       60472-42-6, Sokalan CP 5
                                                                  60650-94-4,
    Tinopal AMS-GX
                      178949-82-1
    RL: PRP (Properties); TEM (Technical or engineered material use); USES
     (Uses)
        (compns. and methods for treating shoes)
IT
                                335372-63-9
     335321-64-7, Lubritan AS
     RL: PRP (Properties); TEM (Technical or engineered material use); USES
     (Uses)
        (conditioning agent; compns. and methods for treating shoes)
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IT
     7585-39-9, .beta.-Dextrin
     RL: PRP (Properties); TEM (Technical or engineered material use); USES
     (Uses)
        (deodorant; compns. and methods for treating shoes)
IT
     55-56-1, Chlorohexidine
                               55-56-1D, Chlorohexidine, salt
                                                                 121-54-0,
     Benzethonium chloride
                             123-03-5, Cetylpyridinium chloride
                                                                   4080-31-3,
                                                          6248-28-8, Benzoyl
     N-(3-Chloroallyl) hexaminium chloride
                                             4252-56-6
                   10543-57-4, Tetraacetyl ethylenediamine
     caprolactam
                                                              14468-76-9,
     4-Nitrobenzoylcaprolactam
                                 25155-18-4, MethylBenzethonium chloride
     32289-58-0, Polyhexamethylene Biguanide hydrochloride
                                                              101482-85-3D,
     Nonanoyloxybenzenesulfonic acid, salt
                                              101843-38-3D, Dodecanoic acid,
     sulfophenyl ester, salt
                               104788-67-2
                                              104788-71-8, N-Lauroyl-(6-
                                104788-73-0, N-Nonanoyl-(6-
     aminoperoxycaproic acid)
     aminoperoxycaproic acid)
                                108608-43-1D,
     OctanovloxyBenzenesulfonic acid, salt
                                              128275-31-0
                                                            133725-71-0
     168051-91-0, 3-Chlorobenzoylcaprolactam
                                               168151-92-6,
     4-[N-(Nonanoyl)amino hexanoyloxy]hexanoyloxybenzenesulfonic acid sodium
            181381-62-4D, Decanoyloxybenzoic acid, salt
                                                           201413-62-9D, salt
     223712-92-3D, Benzoyloxybenzenesulfonic acid, salt
                                                           223712-95-6D,
     10-Undecenoyloxybenzenesulfonic acid, salt
     RL: PRP (Properties); TEM (Technical or engineered material use); USES
     (Uses)
        (disinfecting agent; compns. and methods for treating shoes)
     7173-51-5, Bardac 2250
IT
     RL: PRP (Properties); TEM (Technical or engineered material use); USES
        (disinfecting agents; compns. and methods for treating shoes)
IT
     186359-90-0, Neodox 25-6
     RL: PRP (Properties); TEM (Technical or engineered material use); USES
        (nonionic surfactant (Shell); compns. and methods for treating shoes)
RE.CNT
       15
RE
(1) Anon; PATENT ABSTRACTS OF JAPAN 1997, V1997(07)
(2) Anon; PATENT ABSTRACTS OF JAPAN 1998, V1998(02)
(3) Anon; PATENT ABSTRACTS OF JAPAN 2000, V2000(04)
(4) Baeck; US 5883064 A 1999 HCAPLUS
(5) Barrat; US 4285841 A 1981 HCAPLUS
(6) Henkel Kgaa; DE 4229660 A 1994 HCAPLUS
(7) Hosokawa, K; JP 2000014965 A 2000
(8) Hubmejer; GB 378400 A 1932
(9) Johnson Kk; JP 09087685 A 1997 HCAPLUS
(10) Miracle; US 5576282 A 1996 HCAPLUS
(11) Reckitt & Colman Inc; WO 9700738 A 1997 HCAPLUS
(12) Remaili, S; BR 9304039 A 1995
(13) Unilever Plc; EP 0786514 A 1997 HCAPLUS
(14) Unilever Plc; WO 9936499 A 1999 HCAPLUS
(15) Yoshioka, M; JP 09271597 A 1997
     102-76-1, Triacetin
ΙT
     RL: PRP (Properties); TEM (Technical or engineered material use); USES
        (compns. and methods for treating shoes)
RN
     102-76-1 HCAPLUS
CN
     1,2,3-Propanetriol, triacetate (9CI) (CA INDEX NAME)
         OAc
Aco-CH2-CH-CH2-OAc
```

L69 ANSWER 2 OF 29 HCAPLUS COPYRIGHT 2001 ACS AN 2001:294876 HCAPLUS

```
DN
     134:300656
ΤI
     Tooth whitening compositions
IN
     Montgomery, R. Eric
     OraCeutical LLC, USA
PA
SO
     U.S., 10 pp.
     CODEN: USXXAM
DT
     Patent
LΑ
     English
IC
     ICM
          A61K007-16
          A61K007-20
     ICS
NCL
     424053000
CC
     62-7 (Essential Oils and Cosmetics)
FAN.CNT 1
     PATENT NO.
                      KIND
                             DATE
                                            APPLICATION NO.
                                            ______
     US 6221341
                                            US 1998-196403
PΙ
                       B1
                             20010424
                                                              19981119
     OS 1997-66187
PRAI
                       P
                            19971119
     Novel compns. and methods are disclosed for cosmetically treating
AB
     teeth in a manner to increase brightness or shade of the
     teeth. The compns. include a low mol. wt. compd. having a high
     acetyl group functionality useful in the prodn. of a peroxy
     acid which then acts as a whitening agent.
     Toothpastes contain e.g. glyceryl triacetate
     and Na percarbonate.
ST
     tooth whitening compn glyceryl
     triacetate peroxide generator
ΙT
     Dentifrices
        (tooth whitening compns.)
IT
     102-76-1, Glyceryl triacetate
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (tooth whitening compns.)
IT
     79-21-0, Peroxyacetic acid 7722-84-1,
     Hydrogen peroxide, biological studies 15630-89-4
     , Sodium percarbonate
     RL: BUU (Biological use, unclassified); FMU (Formation, unclassified);
     BIOL (Biological study); FORM (Formation, nonpreparative); USES (Uses)
        (tooth whitening compns.)
RE.CNT
        26
RE
(1) Anon; EP 0545594 Al 1993 HCAPLUS
(2) Anon; WO 9320167 1993 HCAPLUS
(3) Anon; WO 970777 1994
(4) Anon; WO 9711676 1997 HCAPLUS
(5) Anon; WO 9940870 1999 HCAPLUS
(6) Boll; US 5151212 1992 HCAPLUS
(7) Broze; US 4800038 1989 HCAPLUS
(8) Broze; US 5047168 1991 HCAPLUS
(9) Church; US 5279816 1994 HCAPLUS
(10) Damani; US 5447725 1995 HCAPLUS
(11) Davies; US 2955905 1960
(12) Jones; US 3956159 1976 HCAPLUS
(13) Michaels; US 5885554 1999 HCAPLUS
(14) Michaels; US 5939080 1999 HCAPLUS
(15) Montgomery; US 5816802 1998
(16) Montgomery; US 5908614 1999 HCAPLUS
(17) Montgomery; US 5922307 1999 HCAPLUS
(18) Nakagawa; US 3901819 1975 HCAPLUS
(19) Nakagawa; US 4016090 1977 HCAPLUS
(20) Russell; US 5102574 1992 HCAPLUS
(21) Schepers; US 5011622 1991 HCAPLUS
(22) Schepers; US 5503765 1996 HCAPLUS
(23) Schow; US 5290566 1994 HCAPLUS
(24) van der Hoeven; US 4950424 1990 HCAPLUS
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(25) Viscio; US 5302375 1994 HCAPLUS
(26) Wilsbere; US 4610799 1986 HCAPLUS
ΙT
     102-76-1, Glyceryl triacetate
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (tooth whitening compns.)
     102-76-1 HCAPLUS
RN
CN
     1,2,3-Propanetriol, triacetate (9CI)
                                            (CA INDEX NAME)
         OAc
AcO-CH2-CH-CH2-OAc
    7722-84-1, Hydrogen peroxide, biological
     studies 15630-89-4, Sodium percarbonate
     RL: BUU (Biological use, unclassified); FMU (Formation, unclassified);
     BIOL (Biological study); FORM (Formation, nonpreparative); USES (Uses)
        (tooth whitening compns.)
RN
     7722-84-1 HCAPLUS
CN
     Hydrogen peroxide (H2O2) (9CI)
                                      (CA INDEX NAME)
но-он
RN
     15630-89-4 HCAPLUS
     Carbonic acid disodium salt, compd. with hydrogen peroxide (H2O2) (2:3)
CN
           (CA INDEX NAME)
     CM
          1
     CRN
          7722-84-1
     CMF
          H2 O2
но-он
     CM
          2
          497-19-8
     CRN
          C H2 O3 . 2 Na
     CMF
HO-C-OH
    Na
L69
    ANSWER 3 OF 29 HCAPLUS COPYRIGHT 2001 ACS
     2000:900882 HCAPLUS
ΑN
DN
     134:58098
ΤI
     Pulp bleaching activator and its use
     Jakara, Jukka; Paren, Aarto
IN
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Kemira Chemicals Oy, Finland

PCT Int. Appl., 11 pp.

PA SO

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CODEN: PIXXD2
DT
     Patent
LA
     English
     ICM D21C009-16
ΙC
     43-6 (Cellulose, Lignin, Paper, and Other Wood Products)
CC
FAN.CNT 1
     PATENT NO.
                      KIND
                            DATE
                                            APPLICATION NO.
     WO 2000077297
PΙ
                       Α1
                            20001221
                                            WO 2000-FI534
                                                             20000614
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
             CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
             ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,
             LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD,
                                         TR, TT, TZ, UA, UG, US, UZ, VN, YU,
             SE, SG, SI, SK, SL, TJ,
                                     TM,
             ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
            CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                            FI 1999-1365
     FI 9901365
                       Α
                            20001216
                                                             19990615
PRAI FI 1999-1365
                       Α
                            19990615
     The invention relates to a bleaching activator that can be used
     to improve the opacity of peroxide-bleached pulps
     contg. lignin, and to a method for using the activator. The activator is
     a glycerol mono-, di-, or triformate, -acetate, or -propionate. Examples
     were given using triacetin on chemithermomech., refiner mech., pressure
     groundwood, and mech. pulps.
ST
     pulp bleaching activator glyceride
IT
     Pulp bleaching
        (glyceride-based activators for peroxide bleaching
IT
     Chemithermomechanical pulp
        (glyceride-based activators for peroxide bleaching
        of)
IT
     Bleaching agents
        (glyceride-based activators for peroxide bleaching
        of pulp)
IΤ
     Glycerides, uses
     RL: CAT (Catalyst use); USES (Uses)
        (glyceride-based activators for peroxide bleaching
        of pulp)
TT
     Chelating agents
        (in glyceride-based activators for peroxide bleaching
        of pulp)
TТ
     Cellulose pulp
        (mech., refiner; glyceride-based activators for peroxide
     bleaching of)
IT
     Cellulose pulp
        (mech.; glyceride-based activators for peroxide
     bleaching of)
IT
     102-76-1, Glycerol triacetate 25395-31-7, Glycerol
     diacetate
     RL: CAT (Catalyst use); USES (Uses)
        (glyceride-based activators for peroxide bleaching
        of pulp)
     1344-09-8, Water glass
TT
     RL: CAT (Catalyst use); USES (Uses)
        (in glyceride-based activators for peroxide bleaching
        of pulp)
     67-43-6, DTPA
                    79-21-0, Peracetic acid 7722-84-1,
ΤT
     Hydrogen peroxide, uses
     RL: NUU (Nonbiological use, unclassified); USES (Uses)
        (in glyceride-based activators for peroxide bleaching
        of pulp)
RE.CNT
```

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RE
(1) Anon; JP A55158394 1980
(2) Unilever Nv; EP 0481792 Al 1992 HCAPLUS
(3) Warwick Internaitonal Group Limited; WO 9418299 A1 1994 HCAPLUS
(4) Warwick International Group Limited; WO 9521290 Al 1995 HCAPLUS
ΙT
     102-76-1, Glycerol triacetate 25395-31-7, Glycerol
     diacetate
     RL: CAT (Catalyst use); USES (Uses)
        (glyceride-based activators for peroxide bleaching
        of pulp)
RN
     102-76-1 HCAPLUS
     1,2,3-Propanetriol, triacetate (9CI)
                                            (CA INDEX NAME)
         OAc
AcO-CH2-CH-CH2-OAc
RN
     25395-31-7 HCAPLUS
CN
     1,2,3-Propanetriol, diacetate (9CI)
                                           (CA INDEX NAME)
     CM
     CRN
          64-19-7
     CMF
          C2 H4 O2
   \cap
HO-C-CH3
     CM
     CRN
          56-81-5
     CMF
          C3 H8 O3
        OH
HO-CH2-CH-CH2-OH
IT
     7722-84-1, Hydrogen peroxide, uses
     RL: NUU (Nonbiological use, unclassified); USES (Uses)
        (in glyceride-based activators for peroxide bleaching
        of pulp)
     7722-84-1 HCAPLUS
RN
     Hydrogen peroxide (H2O2) (9CI)
CN
                                      (CA INDEX NAME)
но-он
     ANSWER 4 OF 29 HCAPLUS COPYRIGHT 2001 ACS
L69
     2000:688442
                 HCAPLUS
ΑN
DN
     133:283927
TΙ
     Method for treatment of underground reservoirs
ΙN
     Harris, Ralph Edmund; McKay, Ian Donald
PΑ
     Cleansorb Limited, UK
SO
     PCT Int. Appl., 25 pp.
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CODEN: PIXXD2
DT
     Patent
LA
     English
IC
     ICM
          E21B037-06
     IÇS
         E21B043-25
     51-2 (Fossil Fuels, Derivatives, and Related Products)
CC
FAN.CNT 1
     PATENT NO.
                       KIND
                             DATE
                                             APPLICATION NO.
                                                               DATE
     WO 2000057022
                             20000928
                                             WO 2000-GB1032
PΙ
                       Α1
                                                               20000320
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
             CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
             ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,
             LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,
         SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRAI GB 1999-6484
                       Α
                             19990319
     A method for treating an underground reservoir, which method comprises
     introducing into the reservoir a treatment fluid comprising, dissolved or
     dispersed in water, an ester and a polymer breaker, such that the ester
     hydrolyzes to produce an org. acid to dissolve acid sol. material present
     within the reservoir and the polymer breaker degrades polymeric material
     present within the reservoir.
ST
     underground reservoir well treatment fluid enzyme breaker
IT
     Carboxylic acids, uses
     RL: NUU (Nonbiological use, unclassified); USES (Uses)
        (esters; method for treatment of underground reservoirs)
IT
     Natural gas wells
     Oil wells
     Wells
        (method for treatment of underground reservoirs)
IT
     Group IIIA element compounds
     RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
        (perborates, polymer breaker; method for treatment of underground
        reservoirs)
IT
     Hypochlorites
     Peroxides, biological studies
     Peroxysulfates
     RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
        (polymer breaker; method for treatment of underground reservoirs)
ΙT
     Enzymes, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (polysaccharide hydrolyzing, polymer breaker; method for treatment of
        underground reservoirs)
IT
     9000-30-0, Guar
                       9004-34-6, Cellulose, biological studies
     Starch, biological studies
                                   11138-66-2, Xanthan 39464-87-4,
                    73667-50-2, Succinoglycan
     Scleroglucan
     RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
        (method for treatment of underground reservoirs)
                         9001-92-7, Protease 9016-18-6, Carboxylesterase
IT
     9001-62-1, Lipase
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (method for treatment of underground reservoirs)
     102-76-1, 1,2,3-Propanetriol triacetate 111-21-7, Triethylene
IT
     glycol diacetate 111-55-7, Ethylene glycol diacetate 628-68-2,
     Diethylene glycol diacetate 25395-31-7, 1,2,3-Propanetriol
     diacetate
     RL: NUU (Nonbiological use, unclassified); USES (Uses)
        (method for treatment of underground reservoirs)
     563-69-9D, Percarbonic acid, derivs
                                            7722-84-1D, Hydrogen
IT
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13598-52-2D, Phosphoroperoxoic acid,
     peroxide, adducts
              214483-88-2D, Peroxysilicic acid (H4Si(O2)4),
     derivs
     RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
        (polymer breaker; method for treatment of underground reservoirs)
IT
     9075-53-0, Polysaccharidase
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (polymer breaker; method for treatment of underground reservoirs)
RE.CNT
RE
(1) Bj Services Co; WO 9820230 A 1998 HCAPLUS
(2) Gupta, D; US 5226479 A 1993
(3) Shell, F; US 5126051 A 1992 HCAPLUS
(4) Tjon-Joe-Pin, R; WO 9401654 A HCAPLUS
(5) Tjon-Joe-Pin, R; US 5247995 A 1993 HCAPLUS
     102-76-1, 1,2,3-Propanetriol triacetate 25395-31-7,
IT
     1,2,3-Propanetriol diacetate
     RL: NUU (Nonbiological use, unclassified); USES (Uses)
        (method for treatment of underground reservoirs)
     102-76-1 HCAPLUS
RN
     1,2,3-Propanetriol, triacetate (9CI) (CA INDEX NAME)
CN
         OAc
AcO-CH2-CH-CH2-OAc
     25395-31-7 HCAPLUS
RN
CN
     1,2,3-Propanetriol, diacetate (9CI) (CA INDEX NAME)
     CM
     CRN
          64-19-7
     CMF
          C2 H4 O2
HO-C-CH3
     CM
     CRN
          56-81-5
     CMF
          C3 H8 O3
        OH
HO-CH2-CH-CH2-OH
L69
     ANSWER 5 OF 29 HCAPLUS COPYRIGHT 2001 ACS
                                                         DUPLICATE 1
ΑN
     1999:528989 HCAPLUS
DN
     131:149112
ΤI
     Light-activated tooth whitening composition and method
     of using same
     Montgomery, Robert Eric; Nathoo, Salim A.; Cipolla, Anthony John Britesmile, Inc., USA
IN
PA
SO
     PCT Int. Appl., 46 pp.
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CODEN: PIXXD2
DT
     Patent
LA
     English
IC
     ICM
          A61C003-00
         A61C005-00; A61K007-16; A61K033-40
CC
     62-7 (Essential Oils and Cosmetics)
     Section cross-reference(s): 63
FAN.CNT 1
     PATENT NO.
                      KIND
                            DATE
                                            APPLICATION NO.
PΤ
     WO 9940870
                       Α1
                            19990819
                                            WO 1999-US3100
                                                             19990212
             AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
                                          GH, GM, HR, HU, ID, IL,
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             DK, EE, ES, FI, GB, GD,
                                                                  IN,
                                                                      IS,
                                                                          JP,
             KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD,
                                                                 MG,
                                                                      MK,
                                                                          MN.
             MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK,
                                                                  SL,
                                                                      TJ,
                                                                           TM,
                                         ZW, AM, AZ, BY, KG, KZ,
                                                                 MD,
             TR, TT,
                     UA, UG, UZ, VN, YU,
                                                                      RU.
                                                                           TJ,
                     KE, LS, MW, SD, SZ,
                                         UG, ZW, AT, BE, CH, CY, DE, DK, ES,
         RW: GH, GM,
                     GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             FI, FR,
                     GN, GW, ML, MR, NE, SN, TD, TG
             CM,
                GA,
     US 6162055
                       Α
                            20001219
                                            US 1999-234038
     AU 9927647
                       A1
                            19990830
                                            AU 1999-27647
                                                             19990212
     EP 1054642
                            20001129
                                            EP 1999-908146
                                                             19990212
                       Α1
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     NO 2000004046
                            20000925
                                            NO 2000-4046
                                                             20000811
                       Α
PRAI US 1998-74708
                       Ρ
                            19980213
                       Ρ
     US 1998-75222
                            19980219
     US 1999-233793
                       Α
                            19990119
                            19990119
     US 1999-234038
                       Α
                       W
                            19990212
     WO 1999-US3100
AΒ
     The present invention provides a tooth whitening
     compn. having a transparent first component that is a carrier compd. and a
     transparent second component that is an oxidizing compd. which when
     applied to a stained tooth and exposed to actinic light is
     activated to facilitate tooth whitening. The
     invention also provides a method for light-activated tooth
     whitening which comprises applying a tooth-
     whitening compn. to one or more teeth and exposing the
     compn. to actinic light to activate the oxidizing compd. The present
     invention further provides a device for tooth whitening
     which has a light source, at least one optical output, a projection means
     for holding and positioning the optical output outside of a patient's
     mouth in a manner so as to provide approx. simultaneous and uniform
     illumination of a patient's front teeth by the optical output;
     and a connection means for connecting the light source to the optical
              The invention also provides methods of using the device. A
     transparent gel was prepd. contg. distd. water 49.4, 1-hydroxyethylidene-
     1,1-diphosphonic acid 1, glycerin 5, hydrogen peroxide
     (35 %) 42.9, Carbopol 974P 1.7%, and ammonium hydroxide (29 %) q.s. to pH
     5.5. Stained bovine enamel slabs were coated with a 1-2 mm film of the
     compn. and exposed to pulsed actinic radiation from an argon plasma arc
     light source.
ST
     light activated tooth whitening peroxide
     carboxypolymethylene
IT
     Dental materials and appliances
        (devices equipped with light source and optical output; light-activated
      tooth whitening compns. contg. carboxypolymethylene
        gel and oxidants and photoactivators)
IT
     Ketones, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (diketones; light-activated tooth whitening compns.
        contq. carboxypolymethylene gel and oxidants and photoactivators)
IT
     Fiber optics
```

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(fiber-optic instruments; light-activated tooth
      whitening compns. contq. carboxypolymethylene gel and oxidants
        and photoactivators)
IT
     Optical instruments
        (fiber-optic; light-activated tooth whitening
        compns. contg. carboxypolymethylene gel and oxidants and
        photoactivators)
ΙT
     Bleaching
     Dental materials and appliances
     Photosensitizers (pharmaceutical)
     Tooth
        (light-activated tooth whitening compns. contg.
        carboxypolymethylene gel and oxidants and photoactivators)
IT
     Metallophthalocyanines
     Peroxy acids
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (light-activated tooth whitening compns. contg.
        carboxypolymethylene gel and oxidants and photoactivators)
ΙT
     Semiconductor materials
        (particles; light-activated tooth whitening compns.
        contg. carboxypolymethylene gel and oxidants and photoactivators)
ΙT
     Alkali metal oxides
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (peroxides; light-activated tooth whitening
        compns. contg. carboxypolymethylene gel and oxidants and
       photoactivators)
IT
     95-14-7D, 1H-Benzotriazole, derivs.
                                            119-61-9D, Benzophenone, derivs.
     124-43-6, Carbamide peroxide
                                    563-69-9D,
     Percarbonic acid, alkali metal salts
                                             2809-21-4, 1-Hydroxyethylidene-1,1-
     diphosphonic acid 7722-84-1, Hydrogen peroxide
     , biological studies
                            12674-33-8D, Perboric acid, alkali metal salts
     151687-96-6, Carbopol 974p
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (light-activated tooth whitening compns. contg.
        carboxypolymethylene gel and oxidants and photoactivators)
IT
     1314-13-2, Zinc oxide, biological studies 13463-67-7, Titania,
     biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (particles; light-activated tooth whitening compns.
        contg. carboxypolymethylene gel and oxidants and photoactivators)
     50-78-2, Acetylsalicylic acid 102-76-1, Glycerol triacetate
TΤ
     10543-57-4
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (peroxyacid precursor; light-activated tooth
      whitening compns. contq. carboxypolymethylene gel and oxidants
       and photoactivators)
RE.CNT 15
RE
(1) Ardiot; FR 2645734 A1 1990
(2) Becker; US 4952143 A 1990
(3) Benedict; US 4256730 A 1981 HCAPLUS
(4) Cheslak; US 4790752 A 1988
(5) Cheslak; US 4790752 A 1988
(6) Church; US 5279816 A 1994 HCAPLUS
(7) Friedman; US 4661070 A 1987
(8) Montgomery; US 5816802 A 1998
(9) Montgomery; WO 9804235 A1 1998 HCAPLUS
(10) Pellico; US 5718886 A 1998 HCAPLUS
(11) Prencipe; US 5256402 A 1993 HCAPLUS
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(12) Rudy; US 4971782 A 1990 HCAPLUS
(13) Ultradent Products Inc; WO 9114650 A1 1991 HCAPLUS
(14) Viscio; US 5302375 A 1994 HCAPLUS
(15) Zaragoza, T; US 4983381 A 1991
ΙT
     124-43-6, Carbamide peroxide 7722-84-1
       Hydrogen peroxide, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (light-activated tooth whitening compns. contg.
        carboxypolymethylene gel and oxidants and photoactivators)
RN
     124-43-6 HCAPLUS
     Urea, compd. with hydrogen peroxide (H2O2) (1:1) (9CI)
CN
     CM
     CRN
          7722-84-1
     CMF
          H2 O2
но-он
     CM
     CRN
          57-13-6
     CMF
          C H4 N2 O
H2N
    - C- NH2
RN
     7722-84-1 HCAPLUS
CN
     Hydrogen peroxide (H2O2) (9CI)
                                      (CA INDEX NAME)
HO-OH
ΙT
     102-76-1, Glycerol triacetate
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (peroxyacid precursor; light-activated tooth
      whitening compns. contg. carboxypolymethylene gel and oxidants
        and photoactivators)
RN
     102-76-1 HCAPLUS
CN
     1,2,3-Propanetriol, triacetate (9CI) (CA INDEX NAME)
         OAc
Aco-CH2-CH-CH2-OAc
     ANSWER 6 OF 29 HCAPLUS COPYRIGHT 2001 ACS
L69
ΑN
     1998:728456 HCAPLUS
DN
     130:40116
     Oleophilic bleach activator granules and bleach
ΤT
     compositions containing the same with excellent storability and peracid
     generation
     Nishioka, Junko; Miyasaki, Yoshitaka; Sasaki, Hisaya
IN
                             KATHLEEN FULLER EIC1700 308-4290
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PA
     Lion Corp., Japan
     Jpn. Kokai Tokkyo Koho, 11 pp.
SO
     CODEN: JKXXAF
DT
     Patent
LA
     Japanese
IC
     ICM C11D010-02
          C11D001-66; C11D003-12; C11D003-39; C11D003-395; C11D017-06
CC
     46-6 (Surface Active Agents and Detergents)
FAN.CNT 1
     PATENT NO.
                      KIND
                            DATE
                                            APPLICATION NO.
PΙ
     JP 10298598
                      Α2
                            19981110
                                            JP 1997-111334
                                                             19970428
AB
     The title granules are obtained by impregnating bleach
     activators into an oleophilic carrier, wherein the bleach
     activators are hydrophilic group-free org. peracid precursors (m.p.
     .ltoreq.50.degree.) producing percarboxylic acids upon reaction with
     hydrogen peroxide. Granules comprised 60 parts Tokusil -
     NR and 40 parts Ph octoate.
ST
     oleophilic peracid bleach activator; granule peracid
     bleach activator silica carrier
IT
     Bleaching agents
        (oleophilic bleach activator granules and bleach
        compns. contq. the same with excellent storability and peracid
        generation)
IT
     77-89-4 102-76-1
                        5457-78-3, Phenyl octanoate 7631-86-9,
     Tokusil NR, uses
                        59558-23-5
     RL: NUU (Nonbiological use, unclassified); USES (Uses)
        (oleophilic bleach activator granules and bleach
        compns. contg. the same with excellent storability and peracid
        generation)
IT
     102-76-1
     RL: NUU (Nonbiological use, unclassified); USES (Uses)
        (oleophilic bleach activator granules and bleach
        compns. contq. the same with excellent storability and peracid
        generation)
RN
     102-76-1 HCAPLUS
     1,2,3-Propanetriol, triacetate (9CI) (CA INDEX NAME)
CN
         OAc
Aco-CH2-CH-CH2-OAc
L69
    ANSWER 7 OF 29 HCAPLUS COPYRIGHT 2001 ACS
ΑN
     1998:178248 HCAPLUS
DN
     128:258729
     Liquid oxygen-type bleaching composition for textile, counter
TI
     and hard surfaces
     Miyamae, Yoshitaka; Shindo, Hiroyuki; Nishioka, Junko; Fukano, Kazuaki
IN
PA
     Lion Corp., Japan
     Jpn. Kokai Tokkyo Koho, 12 pp.
SO
     CODEN: JKXXAF
DT
     Patent
LA
     Japanese
IC
     ICM C11D007-54
          C11D017-08; C11D007-54; C11D007-08; C11D007-26; C11D007-18;
          C11D007-32
CC
     46-5 (Surface Active Agents and Detergents)
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                            APPLICATION NO.
                            19980317
                      A2
                                            JP 1997-126470
     JP 10072595
PΤ
```

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PRAI JP 1996-190048
                            19960701
     MARPAT 128:258729
OS
AB
     The compn., having good storage stability, comprises aq. soln. contq.
     0.01-30:0.01-30:0.01-30:0.01-10% (a) hydrogen peroxide
     , (b) a boron compd. (Na borate), (c) a polyol (glucose) and (d) a
     reaction product of C2-18 org. peroxide and H2O2
     (e.g., tetracetyl ethylenediamine) mixt., wherein b/c is 1-10/1-30.
ST
     bleaching textile sodium borate hydrogen
     peroxide; glucose bleaching textile storage stability;
     tetracetyl ethylenediamine bleaching counter
ΙT
     Bleaching agents
     Counters
     Fabrics
        (lig. oxygen-type bleaching compn. for textile, counter and
       hard surfaces)
     Laundry detergents
IT
       (liq.; liq. oxygen-type bleaching compn. for textile, counter
        and hard surfaces)
                               50-99-7, Glucose, uses
                                                         77-89-4
                                                                   83-87-4,
IT
     50-70-4, Sorbitol, uses
     Pentaacetylglucose 102-76-1
                                   1330-43-4, Sodium tetraborate
                 2345-34-8, p-Acetyloxybenzoic acid
     1888-91-1
                                                       3027-06-3
                                                                   6248-28-8
     10543-57-4, Tetraacetylethylenediamine
                                              17720-63-7
                                                            28547-23-1,
     p-Benzoyloxybenzoic acid
                                65121-95-1
                                              86960-46-5
                                                           89531-23-7
                                               171550-58-6, p-
     92901-15-0
                  102568-16-1
                                104568-19-6
     Decanoyloxybenzenesulfonic acid
                                       189025-32-9
                                                      205260-18-0
                                                                    205260-19-1
     RL: MOA (Modifier or additive use); USES (Uses)
        (liq. oxygen-type bleaching compn. for textile, counter and
       hard surfaces)
     7722-84-1, Hydrogen peroxide (H2O2),
IT
     RL: TEM (Technical or engineered material use); USES (Uses)
        (liq. oxygen-type bleaching compn. for textile, counter and
       hard surfaces)
     52602-16-1
     RL: MOA (Modifier or additive use); USES (Uses)
        (s lig. oxygen-type bleaching compn. for textile, counter and
       hard surfaces)
     102-76-1
IT
     RL: MOA (Modifier or additive use); USES (Uses)
        (lig. oxygen-type bleaching compn. for textile, counter and
       hard surfaces)
     102-76-1 HCAPLUS
RN
     1,2,3-Propanetriol, triacetate (9CI) (CA INDEX NAME)
CN
         OAc
AcO-CH2-CH-CH2-OAc
IT
     7722-84-1, Hydrogen peroxide (H2O2),
     RL: TEM (Technical or engineered material use); USES (Uses)
        (liq. oxygen-type bleaching compn. for textile, counter and
       hard surfaces)
RN
     7722-84-1 HCAPLUS
CN
     Hydrogen peroxide (H2O2) (9CI) (CA INDEX NAME)
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1996:363432 HCAPLUS
ΑN
DN
     125:13830
ΤI
     Nonaqueous liquid washing or cleaning product with bleaching
     Beaujean, Hans-Josef; Block, Christian; Hofmann, Rainer; Legel, Dieter;
ΙN
     Lind, Rudolf; Penninger, Josef; Richter, Bernd; Schackmann, Reiner;
     Schwadtke, Karl
     Henkel Kommanditgesellschaft Auf Aktien, Germany
PA
SO
     PCT Int. Appl., 27 pp.
     CODEN: PIXXD2
DT
     Patent
     German
LA
     ICM ·C11D017-00
IC
         C11D003-39
     ICS
CC
     46-6 (Surface Active Agents and Detergents)
FAN.CNT 2
     PATENT NO.
                                            APPLICATION NO.
                      KIND
                             DATE
     WO 9605284
                       Α1
                            19960222
                                            WO 1995-EP3124
                                                             19950807
PΙ
         W: CN, JP, KR, US
         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                            19960222
                                            DE 1994-4428958
                                                             19940816
     DE 4428958
                       Α1
     DE 4436151
                       A1
                            19960502
                                            DE 1994-4436151
                                                             19941011
     EP 777722
                       A1
                            19970611
                                            EP 1995-930440
                                                             19950807
     EP 777722
                       В1
                            19990317
         R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL
                            19970723
                                            CN 1995-194597
                                                             19950807
     CN 1155298
                       Α
     JP_10504342
                       T2
                            19980428
                                            JP 1995-506992
                                                             19950807
    US 5880083
                       Α
                            19990309
                                            US 1997-776682
                                                             19970214
PRAI DE 1994-4428958
                            19940816
     DE 1994-4436151
                            19941111
     WO 1995-EP3124
                            19950807
     Solid- and bleaching agent-contg. liq. washing or cleaning
AB
     products are storage stable if they are not aq. and contain from 20 to 78%
     by wt. nonionic surfactants, 0.1 to 25% by wt. anionic surfactants, 1 to
     20% by wt. water-sol. builder substances and 20 to 35% by wt.
     bleaching agents. The products may further contain enzymes and
     dirt-repelling polymers. These products are prepd. by premixing
     surfactants or partial amts. of surfactants and by crushing them so that
     the temp. of the mixt. does not exceed 45.degree.C
ST
     liq nonaq washing compn storage stable; water sol builder nonaq washing
     compn; dirt repelling polymer nonaq washing compn; enzyme
     bleaching nonaq washing compn; bleaching agent nonaq liq
     washing compn; anionic surfactant nonaq liq washing compn; nonionic
     surfactant nonaq liq washing compn; cleaning compn liq nonaq storage
     stable
TT
     Sulfonates
     RL: TEM (Technical or engineered material use); USES (Uses)
        (C8-18 alkane; storage-stable nonaq. liq. washing or cleaning products
        with bleaching power)
TΤ
     Polymers, uses
     RL: MOA (Modifier or additive use); TEM (Technical or engineered material
     use); USES (Uses)
        (dirt-repelling; storage-stable nonaq. liq. washing or cleaning
        products with bleaching power)
IT
     Bleaching agents
        (storage-stable nonaq. liq. washing or cleaning products with
     bleaching power)
IT
     Enzymes
     RL: TEM (Technical or engineered material use); USES (Uses)
        (storage-stable nonaq. liq. washing or cleaning products with
     bleaching power)
ΙT
     Alcohols, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
                             KATHLEEN FULLER EIC1700 308-4290
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(C10-14, ethoxylated propoxylated, Dehydol 980; storage-stable nonag.
        liq. washing or cleaning products with bleaching power)
IT
     Alcohols, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (C12-14, ethoxylated, Dehydol LS 6; storage-stable nonag. lig. washing
        or cleaning products with bleaching power)
IT
     Glycosides
     RL: TEM (Technical or engineered material use); USES (Uses)
        (C12-14-alkyl, storage-stable nonag, liq. washing or cleaning products
        with bleaching power)
IT
     Alcohols, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (C12-18, ethoxylated, Dehydol LT 7; storage-stable nonag. lig. washing
        or cleaning products with bleaching power)
IT
     Alcohols, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (C13-15, ethoxylated, Lutensol AO 7; storage-stable nonag liq washing
        or cleaning products with bleaching power)
ΙT
     Fatty acids, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (Me esters, alkoxylated; storage-stable nonag. lig. washing or cleaning
        products with bleaching power)
IT
     Detergents
        (cleaning compns., storage-stable nonaq. liq. washing or cleaning
        products with bleaching power)
IT
     Carboxylic acids, uses
    RL: MOA (Modifier or additive use); TEM (Technical or engineered material
     use); USES (Uses)
        (di-, C4-6, Sokalan DCS, builder; storage-stable nonaq. liq. washing or
        cleaning products with bleaching power)
IT
     Carboxylic acids, uses
     RL: MOA (Modifier or additive use); TEM (Technical or engineered material
     use); USES (Uses)
        (poly-, sodium salts, storage-stable nonaq. liq. washing or cleaning
        products with bleaching power)
IT
     497-19-8D, Carbonic acid disodium salt, mixt. with C12-14 alkyl
     polyglycoside
     RL: TEM (Technical or engineered material use); USES (Uses)
        (APG-Soda-Compd.; storage-stable nonag. lig. washing or cleaning
        products with bleaching power)
IT
     11138-47-9, Sodium perborate
     RL: MOA (Modifier or additive use); TEM (Technical or engineered material
     use); USES (Uses)
        (bleach; storage-stable nonaq. liq. washing or cleaning
        products with bleaching power)
IT
     102-76-1, Triacetin
                           10543-57-4, N,N,N'N'-
     Tetraacetylethylenediamine
     RL: MOA (Modifier or additive use); TEM (Technical or engineered material
     use); USES (Uses)
        (bleaching activator; storage-stable nonaq. liq. washing or
        cleaning products with bleaching power)
ΙT
     68-04-2, Sodium citrate
                               1344-09-8, Sodium silicate
                                                           13870-28-5, SKS 6
     RL: MOA (Modifier or additive use); TEM (Technical or engineered material
    use); USES (Uses)
        (builder; storage-stable nonaq. liq. washing or cleaning products with
     bleaching power)
ΙT
     25322-68-3
     RL: MOA (Modifier or additive use); TEM (Technical or engineered material
     use); USES (Uses)
        (dirt-repelling polymer; storage-stable nonaq. liq. washing or cleaning
        products with bleaching power)
IT
     98-11-3D, Benzenesulfonic acid, C11-13 alkyl derivs., salts
                                                                    110-11-2,
                    7664-93-9D, Sulfuric acid, esters with C16-18 fatty alcs.,
     Octyl sulfate
                                         9001-62-1, Lipase
                    9000-92-4, Amylase
                                                              9001-92-7,
     sodium salts
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ΙT

RN

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ΑN

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PA

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CC

PΙ

NE, SN, TD, TG

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9003-11-6D, Ethylene oxide-propylene oxide copolymer, C10-14
     alkyl ethers
                  9012-54-8, Cellulase 25155-30-0 25322-68-3D, alkyl
              27252-75-1, Dehydol 04 150770-68-6, Sulfopon T
                                                                 177646-10-5,
     Edenor HT 35
     RL: TEM (Technical or engineered material use); USES (Uses)
        (storage-stable nonag. lig. washing or cleaning products with
     bleaching power)
     11138-47-9, Sodium perborate
     RL: MOA (Modifier or additive use); TEM (Technical or engineered material
     use); USES (Uses)
        (bleach; storage-stable nonaq. liq. washing or cleaning
        products with bleaching power)
     11138-47-9 HCAPLUS
     Perboric acid, sodium salt (8CI, 9CI)
                                            (CA INDEX NAME)
    STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     102-76-1, Triacetin
     RL: MOA (Modifier or additive use); TEM (Technical or engineered material
     use); USES (Uses)
        (bleaching activator; storage-stable nonaq. liq. washing or
        cleaning products with bleaching power)
     102-76-1 HCAPLUS
     1,2,3-Propanetriol, triacetate (9CI) (CA INDEX NAME)
         OAc
AcO-CH2-CH-CH2-OAc
    ANSWER 9 OF 29 HCAPLUS COPYRIGHT 2001 ACS
     1996:679169 HCAPLUS
     125:303861
     Activated liquid bleaching compositions
     Scialla, Stefano; Scoccianti, Raffaele
     Procter and Gamble Company, USA
     Eur. Pat. Appl., 8 pp.
     CODEN: EPXXDW
     Patent
     English
     ICM
         C11D017-00
         C11D003-39
     46-5 (Surface Active Agents and Detergents)
     Section cross-reference(s): 40
FAN.CNT 7
     PATENT NO.
                      KIND
                            DATE
                                           APPLICATION NO.
                      ____
                       A1
                            19961002
                                           EP 1995-203330
                                                            19951202
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE
                                           EP 2000-102577
     EP 1010749
                       A2
                            20000621
                                                            19951202
     EP 1010749
                       A3
                            20000920
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE
     EP 735131
                       Α2
                            19961002
                                           EP 1996-870023
                                                            19960304
     EP 735131
                       ΑЗ
                            19961211
            AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE
                                           CA 1996-2215709 19960304
     CA 2215709
                      · AA
                            19961003
                                           WO 1996-US2308
                                                            19960304
     WO 9630456
                            19961003
            AL, AM, AU, AZ, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, IS,
             JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LV, MD, MG, MK, MN, MW,
             MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, TJ, TM, TR, TT, UA, UG,
             US, UZ
         RW: KE, LS, MW, SD, SZ, UG, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR,
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AU 1996-51713
                                                              19960304
     AU 9651713
                       Α1
                             19961016
     AU 711628
                       B2
                             19991021
     BR 9607962
                       Α
                             19980714
                                            BR 1996-7962
                                                              19960304
                                            JP 1996-529370
                       Т2
     JP 11502883
                             19990309
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     CN 1234819
                                            CN 1996-194174
                       Α
                             19991110
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     WO 9630474
                       A1
                             19961003
                                            WO 1996-US3977
                                                              19960325
         W: CA, JP, MX, US
     NO 9704212
                             19970912
                                            NO 1997-4212
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                       Α
     EI-9703808
                       Α
                             19970926
                                            FI 1997-3808
                                                              19970926
     US 5968885
                       Α
                             19991019
                                            US 1997-981372
                                                              19971218
     US 5900187
                       Α
                             19990504
                                            US 1998-913376
                                                              19980128
     US 5997585
                       Α
                             19991207
                                            US 1998-211380
                                                              19981215
       9945878
     ΑŪ
                       A1.
                            19991111
                                            AU 1999-45878
                                                              19990901
PRAI EP 1995-870026
                       Α
                            19950327
     US 1995-557
                       P
                            19950627
     EP 1995-870079
                       Α
                            19950630
     EP 1995-203330
                       Α3
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     AU 1996-51713
                       A3
                            19960304
     EP 1996-870023
                       Α
                            19960304
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                            19960304
     EP 1996-870054
                       Α
                            19960422
     WO 1996-US10906
                       W
                             19960626
     US 1998-913376
                       Α3
                             19980128
OS
     MARPAT 125:303861
AB
     Liq. bleaching compns. for use in bleaching of
     textiles comprise H2O2 or a source thereof and a bleach
     activator. The liq. bleach activator is hydrophobic, and the
     compns. are formulated as microemulsions of the bleach activator
     in a hydrophilic matrix comprising water and a surfactant system
     comprising an anionic surfactant and a nonionic surfactant.
ST
     hydrophobic liq bleach activator; hydrogen
     peroxide liq bleach activator; anionic surfactant
     bleach compn; nonionic surfactant bleach compn; amine
     oxide bleach agent; textile liq bleaching agent; water
     sol bleaching compn
IT
     Bleaching agents
        (activated liq. bleaching compns. contq. hydrogen
     peroxide and bleach activator)
IT
     Alcohols, uses
     RL: MOA (Modifier or additive use); USES (Uses)
        (C12-13, ethoxylated, Neodol 23-3, nonionic surfactants; activated liq.
      bleaching compns. contg. hydrogen peroxide
        and bleach activator)
IT
     Alcohols, uses
     RL: MOA (Modifier or additive use); USES (Uses)
        (C12-13-branched, ethoxylated, nonionic surfactants; activated liq.
      bleaching compns. contg. hydrogen peroxide
        and bleach activator)
ΙT
     Alcohols, uses
     RL: MOA (Modifier or additive use); USES (Uses)
        (C14-15, ethoxylated, Neodol 45-7; activated liq. bleaching
        compns. contg. hydrogen peroxide and bleach
        activator)
IT
     Alcohols, uses
     RL: MOA (Modifier or additive use); USES (Uses)
        (C14-15-branched, ethoxylated, Dobanol 45-7, nonionic surfactants;
        activated liq. bleaching compns. contg. hydrogen
     peroxide and bleach activator)
     Alcohols, uses
IT
     RL: MOA (Modifier or additive use); USES (Uses)
        (C9-11, ethoxylated, nonionic surfactants; activated liq.
      bleaching compns. contg. hydrogen peroxide
        and bleach activator)
IT
     Amines, uses
                             KATHLEEN FULLER EIC1700 308-4290
```

```
RL: MOA (Modifier or additive use); USES (Uses)
        (N-oxides, activated liq. bleaching compns. contg.
     hydrogen peroxide and bleach activator)
IT
     Surfactants
        (anionic, activated liq. bleaching compns. contg.
     hydrogen peroxide and bleach activator)
IT
     Surfactants
        (nonionic, activated liq. bleaching compns. contg.
     hydrogen peroxide and bleach activator)
IT
     Polyoxyalkylenes, uses
     RL: MOA (Modifier or additive use); USES (Uses)
        (sulfo-terminated, alkyl ethers, sodium salts, anionic surfactants;
        activated liq. bleaching compns. contg. hydrogen
     peroxide and bleach activator)
IT
     100-51-6, Benzyl alcohol, uses
                                      26264-14-2, Propanediol
     RL: MOA (Modifier or additive use); USES (Uses)
        (activated liq. bleaching compns. contg. hydrogen
     peroxide and bleach activator)
IT
     7722-84-1, Hydrogen peroxide, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (activated liq. bleaching compns. contg. hydrogen
     peroxide and bleach activator)
IT
     98-11-3D, Benzenesulfonic acid, alkyl, salts
                                                    7664-93-9D, Sulfuric acid,
     alkyl esters, salts
     RL: MOA (Modifier or additive use); USES (Uses)
        (anionic surfactants; activated liq. bleaching compns. contq.
     hydrogen peroxide and bleach activator)
     77-89-4, Acetyl triethyl citrate 102-76-1 Triacetin
                                                             7572-23-8
IT
     167846-24-4
   \ RL: MOA (Modifier or additive use); USES (Uses)
        (bleach activator; activated liq. bleaching compns.
        contg. hydrogen peroxide and bleach
        activator)
IT
     7722-84-1, Hydrogen peroxide, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (activatéd liq. bleaching compns. contg. hydrogen
     peroxide and bleach activator)
     7722-84-1 HCAPLUS
RN
     Hydrogen peroxide (H2O2) (9CI) (CA INDEX NAME)
CN
но-он
     102-76-1, Triacetin
IT
     RL: MOA (Modifier or additive use); USES (Uses)
        (bleach activator; activated liq. bleaching compns.
       contg. hydrogen peroxide and bleach
        activator)
RN
     102-76-1 HCAPLUS
CN
     1,2,3-Propanetriol, triacetate (9CI)
                                           (CA INDEX NAME)
         OAc
Aco-CH2-CH-CH2-OAc
    ANSWER 10 OF 29 HCAPLUS
                               COPYRIGHT 2001 ACS
L69
     1996:469594
                 HCAPLUS
AΝ
DN
     125:118089
     Use of combinations of activators for inorganic peroxy
ΤI
     acids in bleaching and disinfecting compositions
```

```
Wilde, Andreas; Liphard, Maria; Kuester, Harald; Pegelow, Ulrich; Hill,
IN
     Karlheinz; Junkes, Christian; Block, Christian
PA
     Henkel Kgaa, Germany
SO
     Ger. Offen., 8 pp.
     CODEN: GWXXBX
DT
     Patent
LA
     German,
IC
     ICM C11D003-39
          C11D003-26; A01N059-00; D06L003-02; A61L002-16; C07C233-91;
          C07C409-24; C07D227-093
ICA
     C07C407-00; C07H015-04; C07C229-16; C07C069-21
     C11D003-39, C11D003-26; C11D001-02, C11D001-66, C11D003-386, C11D003-20,
     C11D003-382, C11D003-12
CC
     46-5 (Surface Active Agents and Detergents)
FAN.CNT 1
                                            APPLICATION NO.
                      KIND
                             DATE
     PATENT NO.
                       ____
                                            ______
     DE 4443177
                       Α1
                             19960613
                                            DE 1994-4443177
                                                              19941205
PI
     WO 9617920
                       A1
                             19960613
                                            WO 1995-EP4663
                                                              19951127
         W: JP, US
         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                             19941205
PRAI DE 1994-4443177
OS
     MARPAT 125:118089
AB
     Activator combinations which provide long- and short-chain peroxy
     acids [e.g., N-nonanoylsuccinimide and (Ac2NCH2)2, resp.] are
     useful in compns. (e.g., laundry detergents) contg. inorg. peroxy
     acids (e.g., Na perborate monohydrate).
     nonanovlsuccinimide activator mixt peroxygen bleach;
     tetraacetylethylenediamine activator mixt peroxygen
     bleach; perborate bleach activator mixt; laundry
     detergent bleach activator mixt; succinimide nonanoyl activator
     mixt peroxygen bleach; peroxide
     bleach activator mixt
     Bactericides, Disinfectants, and Antiseptics
TT
        (mixts. of activators for inorg. peroxy acids in)
ΤT
     Bleaching agents
        (peroxygen; mixts. of activators for)
     Detergents
        (laundry, mixts. of activators for inorg. peroxy
      acids in)
ΙT
     7722-84-1, Hydrogen peroxide, uses
     10332-33-9, Sodium perborate monohydrate
     RL: TEM (Technical or engineered material use); USES (Uses)
     (bleaching agent; mixts of activators for) 83-87-4 102-76-1, Triacetin 111-55-7, Ethylene glycol
IT
                 6291-42 5. Lactose octaacetate
                                                  6866-50-8, Fructose
     pentaacetate
                    7093-88-1, 2,5-Diacetoxy-2,5-dihydrofuran 10543-57-4,
     Tetraacetylethylenediamine 10543-60-9, Tetraacetylglycoluril
     30571-56-3, Xylose tetraacetate 68449-52-5, N-Nonanoylsuccinimide
     86320-44-7, 1,5-Diacetyl-2,4-dioxohexahydro-1,3,5-triazine
     RL: MOA (Modifier or additive use); USES (Uses)
        (in mixts. of activators for peroxygen bleaching
        agents)
IT
     7722-84-1, Hydrogen peroxide, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (bleaching agent; mixts. of activators for)
RN
     7722-84-1 HCAPLUS
CN
     Hydrogen peroxide (H2O2) (9CI) (CA INDEX NAME)
```

HO-OH

IT 102-76-1, Triacetin

```
RL: MOA (Modifier or additive use); USES (Uses)
        (in mixts. of activators for peroxygen bleaching
        agents)
     102-76-1 HCAPLUS
RN
     1,2,3-Propanetriol, triacetate (9CI) (CA INDEX NAME)
CN
         OAc
AcO-CH2-CH-CH2-OAc
L69
    ANSWER 11 OF 29 HCAPLUS COPYRIGHT 2001 ACS
ΑN
     1995:654884 HCAPLUS
DN
     123:35836
ΤI
     Compositions for bleaching stains without discoloring colored
     fabrics
ΙN
     Matsunaga, Satoshi; Miyamae, Yoshitaka; Inoha, Mieko; Yoshimura, Haruo
PA
     Lion Corp., Japan
SO
     PCT Int. Appl., 33 pp.
    CODEN: PIXXD2
DT
     Patent
LA
     English
     ICM C11D003-39
TC
CC
     46-5 (Surface Active Agents and Detergents)
FAN.CNT 1
     PATENT NO.
                      KIND
                            DATE
                                           APPLICATION NO.
     _____
                                           ______
PΙ
     WO 9419446
                       Α1
                            19940901
                                           WO 1994-JR307
                                                             19940225
        W: AU, BB, BG, BR, BY, CA, CN, CZ, FI, GE, HU, JP, KR, KZ, LK, LV,
             MG, MN, MW, NO, NZ, PL, RO, RU, SD, SK, UA, US, UZ, VN
         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,
             BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
     AU 9461156
                       Α1
                            19940914
                                           AU 1994-61156
                                                            19940225
PRAI JP 1993-63168
                            19930226
     JP 1993-113829
                            19930415
    WO 1994-JP307
                            19940225
AB
    The title compns., showing high bleaching power, comprise a
    peroxygen compd. and a mixt. of an org. per acid (or precursor)
     and an amine, amine salt and/or quaternary ammonium salt, the mixt. being
     granulated with a binder or impregnated into a carrier. A
    bleaching compn. contained Na percarbonate and a granulated mixt.
     of (Ac2NCH2)2, (2-hydroxyethyl)amine sulfate, and polyethylene glycol.
ST
     percarbonate bleach amine colored fabric; amine
     peroxygen bleach colored fabric; ammonium salt
     peroxygen bleach colored fabric; laundry detergent
    bleach colored fabric; activator bleach amine colored
     fabric; discoloration prevention bleaching colored fabric
     Fatty acids, uses
ΙT
     RL: MOA (Modifier or additive use); USES (Uses)
        (amine salts; in peroxygen compd.-contg. bleach
        compns. for white and colored fabrics)
ΙT
     Amines, uses
     Quaternary ammonium compounds, uses
     RL: MOA (Modifier or additive use); USES (Uses)
        (in peroxygen compd.-contg. bleach compns. for
      white and colored fabrics)
ΤТ
     Granulation
        (of bleach activator compns. for bleaching
      white and colored fabrics)
IT
     Bleaching agents
        (peroxygen; for white and colored fabrics)
IT
     Detergents
```

```
(laundry, contg. bleaching agents for white and
         colored fabrics)
      25322-68-3
 IT
      RL: MOA (Modifier or additive use); USES (Uses)
         (binders; in granulated amine-peroxygen bleach
         activator mixts.)
IT
                                                89740-12-5, Sodium
      10543-57-4, Tetraacetylethylenediamine
      p-octanoyloxybenzenesulfonate
                                       131501-22-9
                                                     164460-15-5, Sodium
      4-octanoyloxybenzoate
      RL: MOA (Modifier or additive use); USES (Uses)
         (bleach activators; in granulated amine-contg. compns. for
      bleaching of white and colored fabrics)
 IT
      4452-58-8, Sodium percarbonate
      RL: MOA (Modifier or additive use); USES (Uses)
         (in compns. for bleaching of white and colored
         fabrics)
      83-87-4 102-76-1, Triacetin ) 604-70-6, Tetraacetyl methyl
 ΙT
                  566 0-31-6, 4-Octanoyloxybenzoic acid
      glucoside
      RL: MOA (Modifier or additive use); USES (Uses)
         (in granulated amine-contg. compns. for bleaching of
       white and colored fabrics)
                                   593-51-1, Methylamine hydrochloride
 IT
      107-64-2
                 111-42-2, uses
      1118-41-8, Diheptadecyldimethylammonium chloride
                                                          7376-31-0,
      Triethanolamine sulfate
                                16039-66-0
                                              20261-59-0 22029-36-3
      22029-38-5
                  53404-39-0, Myristic acid diethanolamine salt
                                                                     53576-51-5
      53926-87-7, Benzoic acid diethanolamine salt
                                                      61345-67-3, Diethanolamine
3961-42-2 74267-56-4
               66553-53-5, N-Methylundecylamine
                                                    68961-42-2
      sulfate
      93893-01-7
                   164460-09-7
                                  164460-10-0
                                                164460-11-1
                                                              164460-12-2
      164460-13-3
                    164460-14-4
      RL: MOA (Modifier or additive use); USES (Uses)
         (in peroxygen compd.-contg. bleach compns. for
      .white and colored fabrics)
 ΙT
      4452-58-8, Sodium percarbonate
      RL: MOA (Modifier or additive use); USES (Uses)
         (in compns. for bleaching of white and colored
         fabrics)
 RN
      4452-58-8 HCAPLUS
 CN
      Carbonoperoxoic acid, disodium salt (9CI) (CA INDEX NAME)
      - O- OH
      Na
      102-76-1, Triacetin
 TΨ
      RL: MOA (Modifier or additive use); USES (Uses)
         (in granulated amine-contg. compns. for bleaching of
       white and colored fabrics)
      102-76-1 HCAPLUS
```

RN

CN

ANSWER 12 OF 29 HCAPLUS COPYRIGHT 2001 ACS KATHLEEN FULLER EIC1700 308-4290

1,2,3-Propanetriol, triacetate (9CI) (CA INDEX NAME)

```
AN
     1994:412285 HCAPLUS
DN
     121:12285
     Bleaching of surfactants by peroxides
ΤI
     Schulz, Paul; Eskuchen, Rainer
IN
     Henkel K.-G.a.A., Germany
PA
     Ger. Offen., 5 pp.
SO
     CODEN: GWXXBX
DT
     Patent
LA
     German
         C07B063-00
TC.
     ICM
          C07C069-18; C07C309-70; B01F017-00; B01F017-56; C11D001-12;
          C11D003-395; B01J020-16; C01F007-00
CC
     46-3 (Surface Active Agents and Detergents)
FAN.CNT 1
                                            APPLICATION NO.
     PATENT NO.
                      KIND
                            DATE
     DE 4225223
                       A1
                             19940203
                                            DE 1992-4225223
                                                              19920730
PΙ
                                            WO 1993-EP1937
     WO 9403423
                       Α1
                             19940217
                                                              19930721
         W: BR, JP, US
         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
PRAI DE 1992-4225223
                            19920730
     Improved brightness is obtained when hydrotalcite or triacetin is present
     during the bleaching of surfactants (e.g., alkyl and/or alkenyl
     glycosides) by peroxides, esp. H2O2.
ST
     bleaching surfactant peroxide hydrotalcite triacetin;
     glycoside surfactant bleaching peroxide;
     hydrogen peroxide bleaching surfactant
ΙT
     Surfactants
        (bleaching of, by peroxides, hydrotalcite and
        triacetin for improved)
TT
     Bleaching
        (of surfactants by peroxides, hydrotalcite and triacetin for
        improved)
ΙT
     Bleaching agents
        (peroxides, for surfactants, in presence of hydrotalcite and
        triacetin)
TT
     Fatty acids, uses
     RL: USES (Uses)
        (Me esters, .alpha.-sulfo, surfactants, bleaching of, by
     peroxides)
ΙT
     Glycosides
     RL: TEM (Technical or engineered material use); USES (Uses)
        (alkyl, surfactants, bleaching of, by peroxides,
        hydrotalcite and triacetia for improved)
ΙT
     7722-84-1, Hydrogen peroxide, uses
     RL: USES (Uses)
        (bleaching by, of surfactants, hydrotalcite and triacetin for
        improved)
                           12304-65-3, Hydrotalcite
ΙT
     102-76-1, Triacetin
     RL: USES (Uses)
        (bleaching of surfactants by peroxide in presence
ΙT
     7722-84-1, Hydrogen peroxide, uses
     RL: USES (Uses)
        (bleaching by, of surfactants, hydrotalcite and triacetin for
        improved)
RN
     7722-84-1 HCAPLUS
CN
     Hydrogen peroxide (H2O2) (9CI) (CA INDEX NAME)
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но-он

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RL: USES (Uses)
        (bleaching of surfactants by peroxide in presence
        of)
RN
     102-76-1 HCAPLUS
     1,2,3-Propanetriol, triacetate (9CI) (CA INDEX NAME)
CN
         OAc
Aco-CH2-CH-CH2-OAc
L69
     ANSWER 13 OF 29 WPIDS COPYRIGHT 2001
                                              DERWENT INFORMATION LTD
ΑN
     1995-051599 [07]
                        WPIDS
DNC
    C1995-023559
     Compositions for aiding periodontal tissue regeneration - comprise
TI
     bio-resorbable polymers, leachable solvents and bio-available drug active
     agents and harden on contact with periodontal tissue, slowly releasing the
     drug.
DC
     A96 B05 D21
IN
     DAMANI, N C; MOHL, D C; SINGER, R E
PA
     (PROC) PROCTER & GAMBLE CO
CYC
PΙ
     WO 9428935
                   A1 19941222 (199507) * EN
                                               16p
                                                      A61K047-14
        RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
         W: CA CN JP RU
     US 5447725
                     19950905 (199541)
                                                      A61K009-06
     EP 702567
                   A1 19960327 (199617)
                                        EN
                                                      A61K047-14
         R: AT BE CH DE DK ES FR GB GR IE IT LI LU NL PT SE
     JP 08511528
                   W
                     19961203 (199710)
                                                      A61K047-14
     CN 1126948
                   Α
                      19960717 (199749)
                                                      A61K047-14
     CA 2164933
                   С
                      19990112 (199913)
                                                      A61K047-30
ADT
    WO 9428935 A1 WO 1994-US5952 19940526; US 5447725 A US 1993-76304
     19930611; EP 702567 A1 EP 1994-917486 19940526, WO 1994-US5952 19940526;
     JP 08511528 W WO 1994-US5952 19940526, JP 1995-501855 19940526; CN 1126948
     A CN 1994-192670 19940526; CA 2164933 C CA 1994-2164933 19940526
    EP 702567 Al Based on WO 9428935; JP 08511528 W Based on WO 9428935
FDT
PRAI US 1993-76304
                      19930611
     EP 430474; WO 9408562
REP
ΙC
     ICM
         A61K009-06; A61K047-14; A61K047-30
          A61K009-00; A61K031-00; A61K031-65; A61K031-74; A61K037-00;
     ICS
          A61K038-17; A61K045-00; A61K047-22
          9428935 A UPAB: 19950223
AB
     WO
     A composition for aiding periodontal tissue regeneration in humans or
     lower animals which is placed at the site in need of periodontal tissue
     regeneration comprises a bioresorbable polymer, leachable solvent and
     bioavailable drug active agents and becomes harder on contact with the
     periodontal tissue so that the composition is effective in aiding tissue
     regeneration and releases a therapeutically effective amt. of drug active
     agent.
          USE - The composition aids periodontal tissue regeneration.
          ADVANTAGE - The compositions are syringeable and when applied become.
     near solid encasing the tooth surface. The active agents are
     slowly released from the matrix due to erosion of and some diffusion
     through the matrix. The bioerodible copolymers used provide a support for
     the growth of the tissue. As the components are bioerodible, there is no
     need to remove the compositions.
     Dwg.0/0
FS
     CPI
FΑ
     AB; DCN
     CPI: A09-A07; A12-V01; A12-V03C1; B04-C01; B04-C02; B04-C03D; B04-N02;
MC
```

B12-M10B; B14-N06B; D08-A05

```
ANSWER 14 OF 29 HCAPLUS COPYRIGHT 2001 ACS
L69
     1994:167328 HCAPLUS
ΑN
DN
     120:167328
     Liquid bleach and detergent compositions containing sodium
ΤI
     superperborate
     Sanderson, William Ronald; Wharne, John David
IN
PΑ
     Solvay Interox Ltd., UK
SO
     Eur. Pat. Appl., 11 pp.
     CODEN: EPXXDW
DT
     Patent
LA
     English
     ICM C11D003-39
IC
          C11D017-00
CC
     46-5 (Surface Active Agents and Detergents)
FAN.CNT 1
     PATENT NO.
                       KIND
                              DATE
                                              APPLICATION NO.
     ______
     EP 565017
                                                                 19930405
PΙ
                        Α2
                              19931013
                                              EP 1993-105586
     EP 565017
                        В1
                              19990707
        R: BE, DE, ES, FR, GB, IT, NL
     ÉS 2136098
                                              ES 1993-105586
                                                                 19930405
                      • ТЗ
                              19991116
                                              US 1993-103301
     US 5458802
                        Α
                              19951017
                                                                 19930412
PRAI &B 1992-7-981
                              19920410
     The title nonaq. compns. contain a Na superperborate NaxByOz.nH2O (x =
AΒ
     1-4; yr =1-5; z = 2-15; n = 1-5; x/y = 0.5-1.2) as a bleaching
     agent which shows better storage stability than Na perborate monohydrate.
     The superperborate is suspended in a liq. such as triacetin, polyethylene glycol with mol. wt. 200, or a nonionic surfactant. A compn. contained
     7.5% Na superperborate (23.2% active O; Na/B molar ratio 1) and 92.5%
     Ethylan CD 919 (ethoxylated C9 alc.).
     perborate super bleach compn liq; bleach compn liq
ST
     superperborate; storage stability superperborate bleach; laundry
     detergent liq bleach superperborate
IT
     Bleaching agents
        (sodium superperborate, liq. compns. contg., stable)
TT
     Alcohols, compounds
     RL: USES (Uses)
        (alkoxylated, bleach compns. contq. sodium superperborate
        and, liq., stable)
ΙT
     Detergents
        (laundry, liq., bleaching agents for, sodium superperborate
ΙT
     Polyoxyalkylenes, compounds
     RL: USES (Uses)
        (mono(alkyl group)-terminated, bleach compns. contg. sodium
        superperborate and, liq., stable)
IT
     Surfactants
        (nonionic, bleach compns. contg. sodium superperborate and,
        liq., stable)
IT
     10543-57-4, Tetraacetylethylenediamine
                                                  91125-43-8
                                                                94354-60-6
     94354-68-4
     RL: USES (Uses)
        (bleach activators, liq. compns. contg. sodium superperborate
        and)
     11138-47-9, Sodium perborate
IT
     RL: USES (Uses)
         (bleach and detergent compns. contg., liq., stable)
     102-76-1 Triacetin 25322-68-3, Polyethylene glycol 25322-68-39, Polyethylene glycol, monoalkyl ethers
IT
     RL: USES (Uses)
        (bleach compns. contg. sodium superperborate and, liq.,
        stable)
     11138-47-9, Sodium perborate
IT
     RL: USES (Uses)
```

```
(bleach and detergent compns. contq., liq., stable)
RN
     11138-47-9 HCAPLUS
CN
     Perboric acid, sodium salt (8CI, 9CI) (CA INDEX NAME)
    STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     102-76-1, Triacetin
RL: USES (Uses)
IT
        (bleach compns. contg. sodium superperborate and, liq.,
        stable)
     102-76-1 HCAPLUS
RN
CN
     1,2,3-Propanetriol, triacetate (9CI) (CA INDEX NAME)
         OAc
Aco-CH2-CH-CH2-OAc
L69
     ANSWER 15 OF 29 HCAPLUS COPYRIGHT 2001 ACS
    .1992:472099 HCAPLUS
ΑN
DN
     117:72099
ΤI
     Detergent compositions in tablet form for improved bleaching of
     fabrics
     Garvey, Michael Joseph; Sims, Peter Stanford
TN
     Unilever PLC, UK; Unilever N. V.
PΑ
     Eur. Pat. Appl., 16 pp.
SO
     CODEN: EPXXDW
DT
     Patent
LA
     English
IC
     ICM
         C11D017-00
     ICS
         C11D003-39
     46-5 (Surface Active Agents and Detergents)
CC
FAN. CNT 1
                                             APPLICATION NO.
     PATENT NO.
                       KIND
                             DATE
PΤ
     EP 481792
                       A 1
                             19920422
                                             EP 1991-309597
                                                               19911017
                       В1
                             19970122
     EP 481792
         R: CH, DE, ES, FR, GB, IT, LI, NL, SE
                             19920420
                                             CA 1991-2053433
                                                              19911015
     CA 2053433
                       AA
     CA 2053433
                        С
                             19970325
     AU 9185843
                       A1
                             19920611
                                             AU 1991-85843
                                                               19911015
                       B2
                             19931104
     AU 643077
                            · 19920609
     BR 9104511
                       Α
                                             BR 1991-4511
                                                               19911017
                                             ES 1991-309597
     ES 2097193
                       Т3
                             19970401
                                                               19911017
     JP 04285699
                       A2
                             19921009
                                             JP 1991-271424
                                                               19911018
     JP 2611071
                       В2
                             19970521
                                                               19911018
                                             ZA 1991-8337
     ZA 9108337
                        Α
                             19930419
PRAI GB 1990-22723
                             19901019
                             19910819
     GB 1991-17862
AB
     Detergent tablets contq. a persalt bleach (esp. Na percarbonate)
     and a bleach activator such as (Ac2NCH2)2 give better
     bleaching performance than detergent powders of the same compn.
ST
     tablet detergent bleaching enhancement; percarbonate
     bleach detergent tablet; tetraacetylethylenediamine bleach
     activator tablet; laundry detergent bleach tablet
IT
     Bleaching agents
        (persalts, laundry detergent tablets contg.)
IΤ
     Detergents
        (laundry, tablets, contg. persalt bleach and bleach
        activator)
IT
     102-76-1, Glycerol triacetate
                                      10543-57-4
                                                    112436-71-2
     142759-48-6
     RL: USES (Uses)
```

```
(bleach activators, laundry detergent tablets contg.)
IT
     4452-58-8, Sodium percarbonate
                                       37244-98-7
     RL: USES (Uses)
        (bleaching agents, laundry detergent tablets contg.)
IT
     102-76-1, Glycerol triacetate
     RL: USES (Uses)
        (bleach activators, laundry detergent tablets contg.)
     102-76-1 HCAPLUS
RN
CN
     1,2,3-Propanetriol, triacetate (9CI) (CA INDEX NAME)
         OAc
AcO-CH2-CH-CH2-OAC
     4452-58-8, Sodium percarbonate
IT
     RL: USES (Uses)
        (bleaching agents, laundry detergent tablets contq.)
RN
     4452-58-8 HCAPLUS
     Carbonoperoxoic acid, disodium salt (9CI) (CA INDEX NAME)
CN
     - O-- OH
      Na
     ANSWER 16 OF 29 HCAPLUS COPYRIGHT 2001 ACS
L69
ΑN
     1991:124960 HCAPLUS
DN
     114:124960
     Method and product for enhanced bleaching of fabrics with
ΤI
     in-situ peracid formation
    Kong, Stephen B.; Ratcliff, Steven D.; Steichen, Dale S.
ΙN
PA
     Clorøx Co., USA
     Eur. Pat. Appl., 21 pp.
SO
     CODEN: EPXXDW
DT
     Patent
     English
LA
         C11D003-39
IC
     ICM
     ICS
          D06L003-00
CC
     46-5 (Surface Active Agents and Detergents)
FAN.CNT 1
     PATENT NO.
                       KIND
                             DATE
                                             APPLICATION NO.
     EP 396287
                       A2
                             19901107
                                             EP 1990-304246
                                                               19900420
PI
                       A3
                             19911002
     EP 396287
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE
         R:
     JP 03007800
                       A2
                                             JP 1990-107726
                                                              19900425
                             19910114
     CA 2015729/
                        AΑ
                                             CA 1990-2015729
                                                              19900430
                             19901104
     US 5505740°
                        Α
                             19960409
                                             US 1993-119506
                                                               19930909
     ¥IŞ 1989-34∕8673
                             19890504
PRAI
        <del>1992-</del>816857
     US
                             19920102
     US 1992-958447
                             19921007
AΒ
     Good bleaching of stains on fabrics is obtained by using a
     product which employs a peracid precursor and a source of H2O2
     to form peracid in a wash soln. and contains a means for delayed release
     of an acid into the soln., i.e., peracid formation is enhanced at high pH
     but stain removal by peracid is enhanced at low pH.
```

ST

IT

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ΙT

RN

CN

L69

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DN ΤT

ΑU

CS

SO

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The delayed acid release is accomplished by controlled hydrolysis of an
     ester, use of an acid which dissolves slowly, etc. Adding
     [(CH2)5CO2-p-C6H4SO3Na]2 to aq. H2O2 soln. at pH 10.5 gave rapid
     formation of diperoxydodecanedioic acid while subsequent release
     of an acid into the soln. (e.g., to give pH 8.5) enhanced the
     bleaching of stained fabrics.
     peroxy acid bleaching pH control;
     diperoxydodecanedioic bleaching pH control;
     peroxydodecanedioic bleaching pH control; laundry
     bleaching peroxy acid; sulfophenyl
     dodecanedioate bleach precursor; laundry bleaching
     peroxy acid
     Bleaching agents
        (peroxy acids, in laundering, pH control for
        activation of)
     Carboxylic acids, uses and miscellaneous
     RL: PEP (Physical, engineering or chemical process); PROC (Process)
        (di-, delayed dissoln. of, in laundry bath contg. peroxy
      acid, for improved bleaching)
     66280-55-5, Diperoxydodecanedioic acid
     RL: USES (Uses)
        (bleaching agent, precursor for, pH control in activation of)
     110-15-6, Succinic acid, uses and miscellaneous 123-99-9, Azelaic acid,
     uses and miscellaneous
                              124-04-9, Adipic acid, uses and miscellaneous
     505-48-6, Suberic acid
     RL: PEP (Physical, engineering or chemical process); PROC (Process)
        (delayed dissolm. of, in laundry bath contg. peroxy
      acid, for improved bleaching)
                                     96-35-5, Methyl glycolate
     96-34-4, Methyl chloroacetate
                                                                  116-54-1
     Methyl dichloroacetate 626-35-7, Ethyl nitroacetate
     RL: RCT (Reactant)
        (hydrolysis of for pH control in activation of laundry bleach
     102-76-(, Glycerol triacetate)
     RL: RCT (Reactant)
        (hydrolysis of, in laundry bath contg. peroxy acid,
        for improved bleaching)
     115652-77-2
     RL: USES (Uses)
        (peroxy acid bleach precursor, activation
        of, pH control in)
     102-76-1, Glycerol triacetate
     RL: RCT (Reactant)
        (hydrolysis of, in laundry bath contg. peroxy acid,
        for improved bleaching)
     102-76-1 HCAPLUS
     1,2,3-Propanetriol, triacetate (9CI) (CA INDEX NAME)
         OAc
AcO-CH_2-CH-CH_2-OAc
    ANSWER 17 OF 29 HCAPLUS COPYRIGHT 2001 ACS
     1991:76573 HCAPLUS
     114:76573
     Influence of desinfectants on epidermal Langerhans cells
     Laub, Ruediger; Moehring, M.; Beyer, C.; Welsch, N.
     Klin. Poliklin. Hautkrankh., Martin-Luther-Univ. Halle-Wittenberg, Halle,
     DDR-4010, Ger. Dem. Rep.
     Z. Gesamte Hyg. Ihre Grenzgeb. (1990), 36(10), 558-60
     CODEN: ZHYGAM; ISSN: 0049-8610
```

```
DT
     Journal
LA
     German
CC
     4-3 (Toxicology)
     Section cross-reference(s): 63
AB
     The daily topical application of 50 .mu.L peroxyethanoic
     acid (POE)-based disinfectants (wolfasteril, W and a further
     development of this, Ujostabil, U) and a H3PO4-based medical disinfectant
     (Ujosan neu, UN) to guinea pig skin for 1, 7, or 14 days resulted in all
     cases in a decrease in skin Langerhan cell (LC) no., whereby the effect
     was greatest for W with decreases to 67, 64.4, and 55.8% of control values
     after 1, 7, and 14 days, resp. Buffering of working disinfectant dilns.
     with 0.2M acetate buffer (pH 5.6) decreased the damage to LCs; for W LC
     no. decreases were 71, 73, and 68%, after 1, 7, and 14 days, resp.
     this only occurred after the 14-day, and for UV only after the 1-day,
     application.
ST
     skin damage peroxyethanoic phosphoric acid
     disinfectant
IT
     Buffer substances and systems
        (peroxyethanoic and phosphoric acid-contg.
        disinfectants toxicity to skin response to)
IT
                                      7664-38-2, Phosphoric
     5699-44-5, Peroxyethanoic acid
     acid, biological studies
     RL: BIOL (Biological study)
        (skin damage from disinfectants contg., soln. buffering decrease of)
                                                    132052-74-5, Ujosan
IT
     102-76-1, Ujostabil
                           8065-77-8, Wofasteril
     RL: BIOL (Biological study)
        (skin damage from, soln. buffering decrease of)
     102-76-1, Ujostabil
IT
     RL: BIOL (Biological study)
        (skin damage from, soln. buffering decrease of)
RN
     102-76-1 HCAPLUS
CN
     1,2,3-Propanetriol, triacetate (9CI)
                                            (CA INDEX NAME)
         OAc
AcO-CH2-CH-CH2-OAc
    ANSWER 18 OF 29 HCAPLUS COPYRIGHT 2001 ACS
L69
ΑN
     1990:161068 HCAPLUS
DN
     112:161068
     Stable liquid cleaning compositions containing capped nonionic surfactant
TT
    and dissolved organic peroxy acid
TN
     Barnes, Stephen George
PA
     Whilever PLC, UK; Unilever N. V.
SO
     Eur. Pat. Appl., 9 pp.
     CODEN: EPXXDW
DT
     Patent
LA
     English
IC
         C11D003-39
     ICM
     ICS
         C11D001-72; C11D003-43
CC
     46-5 (Surface Active Agents and Detergents)
FAN.CNT 1
     PATENT NO.
                      KIND
                            DATE
                                            APPLICATION NO.
                                                              DATE
                             19891102
                                                              19890427
PΙ
     EP 340000
                       Α2
                                            EP 1989-304209
     EP 340000
                       A3
                             19910130
        340000
                       В1
                             19940810
             ζH, DE,
                     ES, FR, GB, IT, LI, NL, SE
         R:
     US 4981606
                             19910101
                                            US 1989-337519
                                                              19890413
                       Α
        132133
                       A1
                             19930817
                                            CA 1989-597596
                                                             19890424
                              KATHLEEN FULLER EIC1700 308-4290
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AU 1989-33744
                                                             19890427
     AU 8933744
                       A1
                            19891102
     AU 618343
                       B2
                            19911219
     JP 01315498
                                            JP 1989-109012
                       Α2
                            19891220
                                                             19890427
                                            ES 1989-304209
     ES 2057115
                       Т3
                            19941016
                                                             19890427
                       Α
                                            BR 1989-2009
     BR 8902009
                            19891205
                                                             19890428
                       Α
                                            ZA 1989-3192
     ZA 8903192
                            19901228
                                                             19890428
PRAI GB 1988-10195
                            19880429
OS
     MARPAT 112:161068
AΒ
     The title compns., esp. useful for removing stains
     from fabrics before laundering, contg. org. solvents, capped alkoxylated
     nonionic surfactants, and dissolved org. peroxy acids
     and have good storage stability, retaining .gtoreq.30% of the
     peroxy acid after 2 mo at 25.degree.. A compn. contg.
     Rewopal MT 65 (Me ether of ethoxylated fatty alc.) 18.4, tert-BuOH 31.2,
     ethylene glycol 21.8, glycerol triacetate 23.0, and 1,12-
     diperoxydodecanedioic acid (I) 5.6% contains 4.55% I after 83 days
     of storage at 25.degree., vs. 1.65 with uncapped Symperoic A7 instead of
     Rewopal MT 65.
ST
     cleaner liq peroxy acid stability; nonionic surfactant .
     liq bleach stability; peroxydodecanedioic stability
     liq cleaner
IT
     Bleaching agents
        (peroxy acids, liq. cleaners contg. capped nonionic
        surfactant and, stable)
IT
     Alcohols, compounds
     RL: USES (Uses)
        (C10-12, ethoxylated, lig. cleaners contg. dissolved peroxy
      acid and, stable)
ΙT
     Polyoxyalkylenes, uses and miscellaneous
     RL: USES (Uses)
        (benzyl- and C10-12-alkyl group-terminated, liq. cleaners contg.
        dissolved peroxy acid and, stable)
IT
     Detergents
        (cleaning compns., liq., contg. capped nonionic surfactant and
      peroxy acid, stable)
TT
     Alcohols, compounds
     RL: USES (Uses)
     (fatty, ethoxylated, liq. cleaners contg. dissolved peroxy acid and, stable)
IT
     66280-55-5, Diperoxydodecanedioic acid
     RL: USES (Uses)
        (bleaching agents, liq. cleaners contg. capped nonionic
        surfactants and, stable)-
     75-65-0, tert-Butyl alcohol, uses and miscellaneous
                                                            84-74-2, Dibutyl
ΙT
     phthalate 102-76-1, Glycerol triacetate
                                              107-21-1,
     1,2-Ethanediol, uses and miscellaneous
     RL: USES (Uses)
        (cleaners contg. capped nonionic surfactants and peroxy
      acid and, liq., stable)
IT
     9004-74-4D, monoalkyl ethers. 26403-74-7D, Polyethylene glycol monobenzyl
     ether, mono-C10-12-alkyl ethers 37281-47-3, Triton DF 12
                                                                  126340-23-6,
     Rewopal MT 65
     RL: USES (Uses)
        (liq. cleaners contg. dissolved peroxy acid and,
        stable)
TΤ
     102-76-1, Glycerol triacetate
     RL: USES (Uses)
        (cleaners contg. capped nonionic surfactants and peroxy
      acid and, liq., stable)
     102-76-1 HCAPLUS
RN
     1,2,3-Propanetriol, triacetate (9CI) (CA INDEX NAME)
CN
```

```
OAc
AcO-CH2-CH-CH2-OAc
     ANSWER 19 OF 29 HCAPLUS COPYRIGHT 2001 ACS
1.69
ΑN
     1988:495134 HCAPLUS
DN
     109:95134
     Process for manufacture of peroxyaldehydes and
TΤ
     peroxycarboxylic acids
     Gaebelein, Klaus
ΤN
PA
     Fed. Rep. Ger.
SO
     Ger. Offen., 13 pp.
     CODEN: GWXXBX
DT
     Patent
LA
     German
IC
     ICM
         C07C178-00
          C07C179-133; C07C179-127; A61K007-48
     TCS
TCA
     A61K009-06; C09K015-06; A61K031-00
     45-4 (Industrial Organic Chemicals, Leather, Fats, and Waxes)
     Section cross-reference(s): 25, 62, 63
FAN.CNT 1
     PATENT NO.
                      KIND
                            DATE
                                            APPLICATION NO.
                                                             DATE
     DE 3643323
PΙ
                       Al
                            19880623
                                            DE 1986-3643323
                                                             19861218
                       C2
                            19920806
     DE 3643323
     Peroxyaldehydes (.alpha.-hydroxyhydroperoxides) and
AB
     peroxycarboxylic acids are prepd. by the oxidn. of satd.
     alcs., aldehydes, or ketones with O3 or O3-contg. gases in presence or
     absence of solvents. These reaction products are useful for medicines (no
     data) and cosmetics (no data). PhCH2OH (200 mL) was ozonized with 200
     mL/min of 5% 03 in O, producing, after 24 h, BzOOH and PhCH(OH)OOH.
ST
     peroxycarboxylic acid manuf; ozonization alc; benzyl
     alc ozonization perbenzoic acid; aldehyde ozonization
     peroxyaldehyde manuf; hydroxyhydroperoxide manuf
     aldehyde ozonization
IT
     Ozonization
        (manuf. of peroxyaldehydes and/or peroxycarboxylic
      acids by, of alcs. or aldehydes or ketones)
IT
     Cosmetics
     Pharmaceuticals
        (manuf. of, by ozonization of satd. alcs. or aldehydes or ketones)
IT
     Oxidation
        (of alcs. and aldehydes and ketones to peroxyaldehydes and/or
      peroxycarboxylic acids)
IT
     Alcohols, reactions
     Aldehydes, reactions
     Ketones, reactions
     RL: RCT (Reactant)
        (ozonization of)
     Bactericides, Disinfectants, and Antiseptics
ΙT
        (ozonized alcs. or aldehydes or ketones as, for human skin)
ΙT
     Hydroperoxides
     RL: PROC (Process)
        (hydroxy, manuf. of, by ozonization of alcs. and aldehydes and ketones,
        for medicines and cosmetics)
IT
     Carboxylic acids, preparation
     RL: PREP (Preparation)
        (peroxy, manuf. of, by ozonization of satd. aldehydes and
        alcs. and ketones, for medicines and cosmetics)
     56-81-5DP, 1,2,3-Propanetriol, ozonized 57-55-6DP, 1,2-Propanediol,
ΙT
                                                     108-93-0P, Cyclohexanol,
                87-89-8DP, myo-Inositol, ozonized
                             KATHLEEN FULLER EIC1700 308-4290
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111-90-0DP, ozonized
                                          25322-69-4DP, ozonized
     preparation
     25395-31-7DP, ozonized
    RL: PREP (Preparation)
        (manuf. of, for medicines and cosmetics)
     64-17-5DP, Ethanol, ozonized 100-51-6DP, Benzenemethanol, ozonized
IT
     108-94-1DP, Cyclohexanone, ozonized
                                           25322-68-3DP, ozonized
     RL: PREP (Preparation)
        (manuf. of, for medicines or cosmetics)
     56-81-5, 1,2,3-Propanetriol, reactions
                                            57-55-6, Propylene glycol,
IT
                                             87-89-8, myo-Inositol
                64-17-5, Ethanol, reactions
     100-51-6, Benzyl alcohol, reactions 107-21-1, Ethylene glycol, reactions
     108-93-0D, Cyclohexanol, ozonized 108-94-1, Cyclohexanone, reactions
     111-90-0
                25265-75-2, Butylene glycol
                                              25322-68-3
                                                           25322-69-4
     25395-31-7
     RL: RCT (Reactant)
        (ozonization of)
ΙT
     10028-15-6
    RL: USES (Uses)
        (ozonization, manuf. of peroxyaldehydes and/or
     peroxycarboxylic acids by, of alcs. or aldehydes or
        ketones)
ΙT
     25395-31-7DP, ozonized
    RL: PREP (Preparation)
        (manuf. of, for medicines and cosmetics)
     25395-31-7 HCAPLUS
RN
CN
    1,2,3-Propanetriol, diacetate (9CI) (CA INDEX NAME)
    CM
    CRN
         64-19-7
         C2 H4 O2
    CMF
   0
HO-C-CH3
    CM
    CRN
          56-81-5
         C3 H8 O3
    CMF
        OH
HO-CH2-CH-CH2-OH
IT
    25395-31-7
    RL: RCT (Reactant)
        (ozonization of)
    25395-31-7 HCAPLUS
RN
    1,2,3-Propanetriol, diacetate (9CI) (CA INDEX NAME)
CN
    CM
          1
         64-19-7
    CRN
    CMF C2 H4 O2
```

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- CH3
     CM
     CRN
          56-81-5
     CMF
          C3 H8 O3
        ОН
HO-CH_2-CH-CH_2-OH
L69
     ANSWER 20 OF 29 HCAPLUS COPYRIGHT 2001 ACS
     1988:133887 HCAPLUS
AN
DN
     108:133887
     Bleaching agent compositions for colored fabrics
ΤI
TN
     Aoyanagi, Muneo; Nakae, Tokuo
     Kao Corp., Japan
Jpn. Kokai Tokkyo Koho, 4
PA
SO
     CODEN: JKXXAF
DT
     Patent
LA
     Japanese
IC
     ICM C11D007-54
CC
     46-5 (Surface Active Agents and Detergents)
FAN. CNT 1
     PATENT NO.
                             DATE
                                            APPLICATION NO.
                      KIND
PΙ
     JP 62252500
                       Α2
                             19871104
                                            JP 1986-96220
     Neutral or weakly alk. title compns. contain 5/95-80/20 mixts. of
     activating agents and urea-H2O2 adduct (I) prepd. in the
     presence of gypsum. Thus, a compn. of 60% I and 40% glucose pentaacetate
     showed pH 6.1, fabric bleaching efficiency 71%, and effective O
     retention after 30-day storage (at 40.degree., 80% humidity) 4.9%; vs.
     10.4, 75, and 0, resp., for a compn. contg. Na2C2O6 instead of I.
ST
     urea hydrogen peroxide adduct bleach; color
     fabric bleaching agent
ΙT
     Amides, uses and miscellaneous
     Esters, uses and miscellaneous
     RL: USES (Uses)
        (activating agents, for hydrogen peroxide-urea
        adduct bleach for colored fabrics)
IT
     Bleaching agents
        (hydrogen peroxide-urea adducts, contg. activating
        agents, for colored fabrics)
IT
     Carbohydrates and Sugars, esters
     RL: USES (Uses)
        (esters, activating agents, for hydrogen peroxide
        -urea adduct bleach for colored fabrics)
ΙT
                126-14-7
                          3891-59-6, Glucose pentaacetate
                                                               7208-47-1,
                            10543-57-4, Tetraacetylethylenediamine
     Sorbitol hexaacetate
     10543-60-9, Tetraacetylglycoluril 13483-16-4
                                                        40437-08-9
     113661-88-4D, Acetoxybenzenesulfonic acid, salts
     RL: USES (Uses)
        (activating agents, for hydrogen peroxide-urea
        adduct bleach for colored fabrics)
     124-43-6
```

TT

RL: USES (Uses)

```
(bleaching agents, contg. activating agents, for colored
        fabric)
     7722-84-1
IT
     RL: USES (Uses)
        (bleaching agents, hydrogen peroxide-urea
        adducts, contg. activating agents, for colored fabrics)
     102-76-1
IT
     RL: USES (Uses)
        (activating agents, for hydrogen peroxide-urea
        adduct bleach for colored fabrics)
RN
     102-76-1 HCAPLUS
     1,2,3-Propanetriol, triacetate (9CI)
                                            (CA INDEX NAME)
CN
         OAc
Aco-CH2-CH-CH2-OAc
IT
     124-43-6
     RL: USES (Uses)
        (bleaching agents, contg. activating agents, for colored
        fabric)
RN
     124-43-6 HCAPLUS
     Urea, compd. with hydrogen peroxide (H2O2) (1:1) (9CI) (CA INDEX NAME)
CN
     CM
          1
          7722-84-1
     CRN
     CMF
          H2 O2
но-он
     CM
          57-13-6
     CRN
          C H4 N2 O
     CMF
   - C- NH2
H2N-
IT
     7722-84-1
     RL: USES (Uses)
        (bleaching agents, hydrogen peroxide-urea
        adducts, contg. activating agents, for colored fabrics)
RN
     7722-84-1 HCAPLUS
CN
     Hydrogen peroxide (H2O2) (9CI) (CA INDEX NAME)
но-он
     ANSWER 21 OF 29 HCAPLUS COPYRIGHT 2001 ACS
L69
ΑN
     1987:409396 HCAPLUS
DN
     107:9396
TI
     Fungus-removing compositions
IN
     Nishiquchi, Hisao; Nakagawa, Junosuke
```

```
PA
     Kao Corp., Japan
     Jpn. Kokai Tokkyo Koho, 4 pp.
SO
     CODEN: JKXXAF
DT
     Patent .
LA
     Japanese
IC
     ICM C11D007-60
     C11D007-60, C11D007-18, C11D007-38, C11D007-32, C11D007-26
ICI
     46-6 (Surface Active Agents and Detergents)
CC
FAN.CNT 1
     PATENT NO.
                       KIND DATE
                                             APPLICATION NO.
     JP 62004794
                        Α2
                             19870110
                                             JP 1985-144365
                                                               19850701
PΙ
     JP 2843028
                        B2
                             19990106
     The title compns., useful for cleaning bathrooms, etc., contg.
AΒ
     H2O2 or H2O2-forming peroxides, activators,
     and peroxydisulfates. A mixt. of H2O2 5.0, tetraacetylglycoluril (I) 5.0, Na peroxydisulfate 5.0, and water
     85.0%, having pH 10.0, gave 90.3% removal of fungus vs. 23.4 without I.
ST
     cleaner peroxide fungus removal; peroxydisulfate
     cleaner fungus removal; tetraacetylglycoluril peroxide fungus
     remover; bleach cleaner fungus removal
ΙT
    · Bleaching agents
        (peroxides, cleaners contq., fungus-removing)
TT
     Detergents
        (cleaning compns., peroxide-contg., fungus-removing)
     7722-84-1, Hydrogen peroxide, uses and
                      7727-54-0, Ammonium peroxydisulfate
                                                              7775-27-1,
     miscellaneous
     Sodium peroxydisulfate 15630-89-4, Sodium
     percarbonate
     RL: TEM (Technical or engineered material use); USES (Uses)
        (cleaning compns. contg., fungus-removing)
     102-76-1
                 597-71-7
                            10543-57-4, Tetraacetylethylenediamine
     10543-60-9
     RL: USES (Uses)
        (peroxide bleach activators, in fungus-removing
        cleaners)
IT
     7722-84-1, Hydrogen peroxide, uses and
     miscellaneous 15630-89-4, Sodium percarbonate
     RL: TEM (Technical or engineered material use); USES (Uses)
        (cleaning compns. contq., fungus-removing)
RN
     7722-84-1 HCAPLUS
CN
     Hydrogen peroxide (H2O2) (9CI) (CA INDEX NAME)
но-он
RN
     15630-89-4 HCAPLUS
     Carbonic acid disodium salt, compd. with hydrogen peroxide (H2O2) (2:3)
CN
     (9CI)
           (CA INDEX NAME)
     CM
          7722-84-1
     CRN
     CMF
          H2 O2
HO-OH
```

CM 2

CRN 497-19-8

CMF C H2 O3 . 2 Na

HO- C- OH

2 Na

IT 102-76-1

RL: USES (Uses)

(peroxide bleach activators, in fungus-removing

cleaners)

RN 102-76-1 HCAPLUS

CN 1,2,3-Propanetriol, triacetate (9CI) (CA INDEX NAME)

OAc

AcO-CH2-CH-CH2-OAc

L69 ANSWER 22 OF 29 HCAPLUS COPYRIGHT 2001 ACS

AN 1987:442124 HCAPLUS

DN 107:42124

TI Non-aqueous liquid detergent composition and perborate anhydrous

IN Green, Robin John; Van der Linden, Arie; Bazley, Michael Raymond Frederick

PA Unilever N. V., Neth.; Unilever PLC

SO Eur. Pat. Appl., 11 pp.

CODEN: EPXXDW

DT Patent

LA English

IC ICM C01B015-12

ICS D06L003-02; C11D007-18

CC 46-5 (Surface Active Agents and Detergents)

FAN.CNT 1

	PAC	TENT NO.		KIN	D DA	ATE		AP	PLICATION NO.	DATE
ΡI	EP	217454		A2	19	870408	- }	EP	1986-201599	19860917
	EΡ	217454		А3	19	880330)			
	EP,	217454		В1	19	920311	_			• •
	- [R: CH, D	Ε,	FR,	GB, I	T, LI,	NL,	SE		
	us	4772412		A	19	880920)	US	1986-910547	19860923
	ΑU	8663153		A1	19	870402	?	AU	1986-63153	19860924
	AU	583425		В2	19	890427	,			
	CA	1285845		A1	19	910709)	CA	1986-519074	19860925
	BR	8604690		Α	19	870623	3	BR	1986-4690	19860929
	ES	2001807		A6	19	880616	5	ES	1986-2277	19860929
	JР	62113705		A2	19	870525)	JP	1986-233093	19860930
	JΡ	04075845		B4	19	921202	2			
	ZA	8607451		Α	19	880525	<u>,</u>	ZA	1986-7451	19860930
PRAI	GB	1985-24064			19	850930)			
	GB	1985-31653			19	851223	}			

AB Na perborate anhyd. prepd. by dehydration of Na perborate monohydrate (I) and having I-Na oxoborate ratio .gtoreq.1.5:1 is esp. useful in nonaq. liq. detergent compns. to improve dispensing behavior without impairing the chem. stability of formulations contg. a peroxy acid bleach precursor, esp. (Ac2NCH2)2.

ST perborate anhyd liq detergent; laundry detergent perborate anhyd; bleach perborate activator detergent; acetylethylenediamine KATHLEEN FULLER EIC1700 308-4290

```
activator perborate detergent; stability perborate bleach
     activator
ΙT
     Detergents
        (perborate anhyd.-contg., stability of perborate activators in)
ΙT
     Bleaching agents
        (sodium perborate, in liq. detergents, stability of
        activators in)
IT
     10332-33-9, Sodium perborate monohydrate
     11138-47-9
     RL: USES (Uses)
        (bleaching agents, detergents contg. activators and, stable)
     102-76-1, Glycerol triacetate 10543-57-4, N,N,N',N'-
IT
     Tetraacetylethylenediamine 25482-78-4
                                              91459-83-5
                                                           94354-68-4
     RL: USES (Uses)
        (perborate bleach activator, in detergents, stability of)
IT
     11138-47-9
     RL: USES (Uses)
        (bleaching agents, detergents contg. activators and, stable)
RN
     11138-47-9 HCAPLUS
     Perboric acid, sodium salt (8CI, 9CI) (CA INDEX NAME)
CN
*** STRUCTURÉ DIAGRAM IS NOT AVAILABLE ***
ΙT
     102-76-↓, Glycerol triacetate
     RL: USES (Uses)
        (perborate bleach activator, in detergents, stability of)
     102-76-1 HCAPLUS
RN
     1,2,3-Propanetriol, triacetate (9CI) (CA INDEX NAME)
CN
         OAc
AcO-CH2-CH-CH2-OAc
    ANSWER 23 OF 29 HCAPLUS COPYRIGHT 2001 ACS
L69
     1988:58367 HCAPLUS
ΑN
     108:58367
DN
     Effect of some activators on decomposition of sodium
ΤI
     perborate in aqueous solutions
     Bunina, N. A.; Kalinina, N. V.; Nechesnyuk, G. P.; Kruchinin, V. A.
ΑU
CS
     USSR
     Zh. Prikl. Khim. (Leningrad) (1987), 60(9), 2091-4
SO
     CODEN: ZPKHAB; ISSN: 0044-4618
DT
     Journal
LA
     Russian
     46-5 (Surface Active Agents and Detergents)
CC
     The decompn. kinetics of Na perborate, a detergent bleach, was
AB
     detd. at 30-65.degree. in the presence of 0.001-0.5 mol/L acetylsalicylic
     acid, glyceryl triacetate, sorbitol hexaacetate, and
     glucosyl pentaacetate (I) as activators. The most efficient activator was
     I which ensured the decompn. of 0.18 N Na perborate with the highest rate
     const. (1.56 . times. 10-3 s-1) and lowest conversion half-time (7.4 min)
     at a low concn. of 0.011 mol/L. The rate consts. depended on activator
     concns. which, in some cases, were limited by soly.
     sodium perborate bleach activator; kinetics
ST
     decompn sodium perborate; catalyst decompn
     sodium perborate
IT
     Dissociation catalysts
        (acetic acid esters, for sodium perborate, activity
        of)
IT
     Detergents
        (bleaching agents for, sodium perborate
```

```
as, activators for, acetic acid esters as)
IT
     Kinetics of dissociation
        (of sodium perborate, in presence of acetic acid
        esters)
ΙT
     Bleaching agents
        (sodium perborate, activators for, acetic acid
        esters as)
IT
     50-78-2, Acetylsalicylic acid 102-76-1, Glyceryl
     triacetate
                  3891-59-6, Glucosyl pentaacetate 7208-47-1,
     Sorbityl hexaacetate
     RL: USES (Uses)
        (bleach activators, for sodium perborate)
     7632-04-4, Sodium perborate
IT
     RL: USES (Uses)
        (bleaching agents, for detergents, activators for, acetic
        acid esters as)
IT
     102-76-1, Glyceryl triacetate
     RL: USES (Uses)
        (bleach activators, for sodium perborate)
RN
     102-76-1 HCAPLUS
CN
     1,2,3-Propanetriol, triacetate (9CI) (CA INDEX NAME)
         OAc
AcO-CH2-CH-CH2-OAc
     7632-04-4, Sodium perborate
IT
     RL: USES (Uses)
        (bleaching agents, for detergents, activators for, acetic
        acid esters as)
RN
     7632-04-4 HCAPLUS
     Perboric acid (HBO(O2)), sodium salt (9CI) (CA INDEX NAME)
CN
0 = B - O - OH
     Na
L69
     ANSWER 24 OF 29 HCAPLUS COPYRIGHT 2001 ACS
     1987:35146 HCAPLUS
ΑN
DN
     106:35146
TI
     Toilet bowl cleaner compositions
IN
     Kato, Hitoshi; Shiozaki, Ryoji; Hiraide, Takashi
     Kao Corp., Japan
Jpn. Kokai Tokkyo Koho, 11 pp.
PA
SO
     CODEN: JKXXAF
DT
     Patent
LA
     Japanese
IC
     ICM C11D017-00
CC
     46-6 (Surface Active Agents and Detergents)
FAN.CNT 1
     PATENT NO.
                      KIND
                             DATE
                                            APPLICATION NO.
                       _---
PI
     JP 61197698
                      A2
                             19860901
                                            JP 1985-39649
                                                              19850228
AB
     The 2-package title compns. with excellent detergency and staining
     prevention contain a bleach compn. and a compn. from (A)
     water-sol. compd(s). with threshold effect 0.1-60, (B) water-sol. inorg.
     compd(s). 5-95, and (C) water-insol. inorg. compd(s). 1-50% at A/(B + C) =
```

```
0.01-1 and C/B = 0.01-1. Thus, a typical compn. comprised a package from
     polyethylene glycol lauryl ether sulfate Na salt 10, Na polymaleate 10, Na
     citrate 10, Na2SO4 20, MgSO4 30, and SiO2 20 parts, and another package of
     50 parts Ca(ClO)2 and 50 parts Ca(ClO)2 and 50 parts NaCl.
ST
    bleach toilet cleaner; polyoxyethylene sulfate toilet cleaner;
    polymaleate toilet cleaner; salt toilet cleaner; sodium sulfate toilet
     cleaner; magnesium sulfate toilet cleaner
ΙT
     Detergents
        (cleaning compns., two-package, for toilet bowls, contg. bleach
IT
                               77-92-9, uses and miscellaneous 102-76-1
     68-04-2, Sodium citrate
     497-19-8, Sodium carbonate, uses and miscellaneous
                                                          1344-09-8, Sodium
               1344-95-2 4452-58-8, Sodium
    percarbonate
                    7487-88-9, Magnesium sulfate, uses and
    miscellaneous
                     7631-86-9, Silica, uses and miscellaneous
                                   7647-14-5,
     7632-04-4, Sodium perborate
     Sodium chloride, usēs and miscēllaneous 7757-82-6, Sodium sulfate, uses
                         7778-54-3, Calcium hypochlorite
     and miscellaneous
                                                            9002-92-0,
     Polyethylene glycol lauryl ether
                                        9004-82-4
                                                    25322-68-3, Polyethylene
              30915-61-8, Sodium polymaleate
                                               37222-66-5, Oxone
                                                                    78948-87-5
    RL: TEM (Technical or engineered material use); USES (Uses)
        (toilet bowl cleaners contg.)
TT
    102-76-1 4452-58-8, Sodium
    percarbonate 7632-04-4, Sodium
    perborate
    RL: TEM (Technical or engineered material use); USES (Uses)
        (toilet bowl cleaners contg.)
RN
     102-76-1 HCAPLUS
CN
    1,2,3-Propanetriol, triacetate (9CI) (CA INDEX NAME)
         OAc
Aco-CH2-CH-CH2-OAc
RN
     4452-58-8 HCAPLUS
    Carbonoperoxoic acid, disodium salt (9CI) (CA INDEX NAME)
CN
HO- C- O- OH
     7632-04-4 HCAPLUS
RN
    Perboric acid (HBO(O2)), sodium salt (9CI) (CA INDEX NAME)
CN
0 = B - O - OH
    ANSWER 25 OF 29 HCAPLUS COPYRIGHT 2001 ACS
1.69
     1987:35144 HCAPLUS
AN
```

106:35144

DN

```
TI
     Toilet bowl cleaner compositions
ΙN
     Kato, Hitoshi; Shiozaki, Ryoji
PΑ
     Kao Corp., Japan
     Jpn. Kokai Tokkyo Koho, 14 pp.
SO
     CODEN: JKXXAF
DT
     Patent
LA
     Japanese
IC
     ICM C11D017-00
CC
     46-6 (Surface Active Agents and Detergents)
FAN.CNT 1
     PATENT NO.
                      KIND
                            DATE
                                           APPLICATION NO.
                                                            .19850227
PΙ
     JP 61197696
                       A2
                            19860901
                                           JP 1985-38541
     The 2-package title compns. with excellent detergency and staining
AB
     prevention comprise a bleach-contg. compn. and a compn. contg.
    (A) 0.1-60% water-sol. org. compd(s). with threshold effect and (B) 1-95%
     water-insol. inorg. compd(s). at A/B wt. ratio 0.01-5.0. Thus, a typical
     compn. comprised a package of polyethylene glycol lauryl ether sulfate Na
     salt 30, Na citrate 30, and Na aluminosilicate 40 parts and another
     package of 50 parts Ca(ClO)2 and 50 parts NaCl.
    bleach toilet cleaner; polyoxyethylene sulfate toilet cleaner;
     citrate toilet cleaner; aluminosilicate toilet cleaner; sodium chloride
     toilet cleaner
     Zeolites, uses and miscellaneous
     RL: TEM (Technical or engineered material use); USES (Uses)
        (toilet bowl cleaners contq.)
IT
     Detergents
        (cleaning compns., two-package, for toilet bowls, contg. bleach
  · 68-04-2, Sodium citrate 102-76-1, Triacetin
                                                   497-19-8, Sodium
     carbonate, uses and miscellaneous 676-46-0, Sodium malate 1344-00-9,
                              1344-95-2, Calcium silicate 4452-58-8,
     Sodium aluminosilicate
                          7631-86-9, Silica, uses and
     Sodium percarbonate
    miscellaneous 7632-04-4, Sodium perborate
     7757-82-6, Sodium sulfate, uses and miscellaneous
                                                          7778-54-3, Calcium
    hypochlorite
                    9004-82-4
                                37222-66-5, Oxone
                                                   78948-87-5
     RL: TEM (Technical or engineered material use); USES (Uses)
        (toilet bowl cleaners contq.)
ΙT
     1335-30-4
     RL: USES (Uses)
        (zeolites, toilet bowl cleaners contg.)
IT
     102-76-1, Triacetin 4452-58-8, Sodium
    percarbonate 7632-04-4, Sodium
    perborate
     RL: TEM (Technical or engineered material use); USES (Uses)
        (toilet bowl cleaners contg.)
RN
     102-76-1 HCAPLUS
CN
     1,2,3-Propanetriol, triacetate (9CI) (CA INDEX NAME)
         OAc
Aco-CH2-CH-CH2-OAc
     4452-58-8 HCAPLUS
RN
CN
     Carbonoperoxoic acid, disodium salt (9CI) (CA INDEX NAME)
```

```
но— с— о— он
О
```

2 Na

RN 7632-04-4 HCAPLUS CN Perboric acid (HBO(O2)), sodium salt (9CI) (CA INDEX NAME)

O == B - O - OH

Na

```
L69
     ANSWER 26 OF 29 HCAPLUS COPYRIGHT 2001 ACS
ΑN
     1976:479623 HCAPLUS
DN
     85:79623
ΤI
     Stable concentrated liquid peroxygen bleach
     composition
     Jones, John Paul
IN
PΑ
     Procter and Gamble Co., USA
     b.s., 4 pp.
SO
     CODEN: USXXAM
DT
     Patent
LA
     English
IC
     C11D007-50
     252104000
NCL.
CC
     39-9 (Textiles)
FAN.CNT 1
     PATENT NO.
                      KIND
                             DATE
                                            APPLICATION NO.
     US 3956159
                       Α
                             19760511
                                            US 1974-526751
                                                              19741125
        1071359
                       Α1
                             19800212
                                            CA 1975-237741
                                                              19751016
PRAI US 1974-526751
                             19741125
     Bleaches contg. a ternary solvent mixt. 94-98, a
     peroxyacid 1-6, a stabilizer which chelates free metal ions
     0.01-0.02, and a buffer 0-3 wt.% were storage-stable for extended periods.
     The ternary mixt. perferably contained tert-butyl alc. (I) [75-65-0]
     25-35, ethylene diacetate (II) [111-55-7] 20-35, and glycerol triacetate
     (III) [102-76-1] 20-35 wt.%. Thus, addn. of 0.004g dipicolinic
     acid [499-83-2] and 2.25g diperazelaic acid [1941-79-3] to a mixt of I 20,
     II 10, and III 10 ml gave a bleach with active O content 5.35%
     after 8 days and 2.24% after 382 days.
ST
     peroxyacid bleach storage stable; peracid
     bleach storage stable; stabilizer dipicolinic acid
     peroxide
IT
     Bleaching agents
        (peroxyacids, storage-stable)
ΙT
     1941-79-3
     RL: USES (Uses)
        (bleaching agents, storage-stable, in ternary org. solvents)
IT
     75-65-0 102-76-1
                        111-55-7
     RL: USES (Uses)
        (nonaq. storage-stable peroxyacid bleaches contg.)
IT
     499-83-2
     RL: USES (Uses)
```

```
(stabilizers, for peroxyacid bleaches for textiles)
ΙT
     102-76-1
     RL: USES (Uses)
        (nonaq. storage-stable peroxyacid bleaches contg.)
RN
     102-76-1 HCAPLUS
CN
     1,2,3-Propanetriol, triacetate (9CI) (CA INDEX NAME)
         OAc
AcO-CH2-CH-CH2-OAc
    ANSWER 27 OF 29 HCAPLUS COPYRIGHT 2001 ACS
L69
ΑN
     1974:537877 HCAPLUS
DN
     81:137877
ΤI
     Bleaching compositions containing inorganic peroxide
IN
     Nakagawa, Yunosuke; Sato, Koitsu; Hakozaki, Syori
PΆ
     Kao Soap Co., Ltd.
    . Japan. Kokai, 5 pp.
     CODEN: JKXXAF
DT
     Patent
LA
     Japanese
NCL
     13(9)B93
     46-6 (Surface Active Agents and Detergents)
CC
FAN.CNT 2
     PATENT NO.
                      KIND
                             DATE
                                            APPLICATION NO.
                                                              DATE
PΙ
     JP 49048580
                       Α2
                             19740510
                                            JP 1972-92265
                                                              19720914
     JP 52006867
                       В4
                             19770225
     DE 2344990
                       Α1
                             19740321
                                            DE 1973-2344990
                                                              19730906
     DE 2344990
                       B2
                             19810108
     DE 2344990\
                       C3
                             19811022
     UŞ 3901819
                       Α
                             19750826
                                            US 1973-395264
                                                              19730907
     ER 2200397
                             19740419
                       Α1
                                            FR 1973-33036
                                                              19730914
     FR 2200397
                             19781110
                       В1
PRAI JP 1972-92265
                             19720914
     Activators for inorg. peroxy acid bleaching
AB
     agents contain 10-90 parts acetate ester of a monosaccharide, a
     disaccharide, a sugar alc., a partial anhydride of a sugar alc., or an
     erythritol having .geq.2 adjacent ester groups and 10-90 parts polyol
     acetate ester m. .leq.30.deg.. Thus, a cotton fabric with tea stain was
     bleached 10 min in an aq. soln. contg. 0.5% Na perborate (I) [
     7632-04-4] and 0.5% 50:50 glucose pentaacetate
     [3891-59-6]-triacetin [102-76-1] at 20.deg. to improve the
     whiteness by 18.6%, compared with 2.1% for a similar treatment
     with I alone.
ST
     bleaching inorg peroxide activator; acetate sugar
     peroxide activator; polyol acetate peroxide activator
TT
     Sugars, esters
     RL: USES (Uses)
        (acetates, perborate activators)
TT
     Bleaching agents
        (sodium perborate, activators for, polyol acetates
        as)
IT
     111-55-7
                7208-47-1
     RL: CAT (Catalyst use); USES (Uses)
        (activators, for peracid bleaching agents)
IT
                3891-59-6
     RL: CAT (Catalyst use); USES (Uses)
        (activators, for perborate bleaching agents)
IT
     7632-04-4
     RL: USES (Uses)
```

```
(bleaching agents, activators for, polyol acetates as)
IT
     102-76-1
     RL: CAT (Catalyst use); USES (Uses)
        (activators, for perborate bleaching agents)
RN
     102-76-1 HCAPLUS
     1,2,3-Propanetriol, triacetate (9CI) (CA INDEX NAME)
CN
         OAc
AcO-CH2-CH-CH2-OAc
IT
     7632-04-4
     RL: USES (Uses)
        (bleaching agents, activators for, polyol acetates as)
RN
     7632-04-4 HCAPLUS
     Perboric acid (HBO(O2)), sodium salt (9CI) (CA INDEX NAME)
CN
0 = B - O - OH
     Na
    ANSWER 28 OF 29 HCAPLUS COPYRIGHT 2001 ACS
L69
ΑN
     1975:103181 HCAPLUS
DN
     82:103181
ΤI
     In situ polymerizing dental fillers
IN
     Kliment, Karel; Tu, Robert S.
PA
     Nation Patent Development Corp.
     Ger. Offen., 24 pp.
SO
     CODEN: GWXXBX
DT
     Patent
LA
     German
IC
     C61K
     63-7 (Pharmaceuticals)
CC
FAN.CNT 1
                                            APPLICATION NO.
     PATENT NO.
                      KIND
                            DATE
                            19741114
                                            DE 1974-2420351 19740426
PΙ
     DE 2420351
                       Α1
     DE 2420351
                       В2
                            19810806
     DE 2420351
                       C3
                            19870709
     US 3925895
                                            US 1973-354866
                       Α
                            19751216
                                                             19730426
     AU 7468256
                                            AU 1974-68256
                                                              19740424
                       Α1
                            19751030
     JP 50042694
                                            JP 1974-46762
                                                             19740426
                       A2
                            19750417
     JP 52023509
                       B4
                             19770624
PRAI US 1973-354866
                             19730426
     Dental neck filling pastes which polymd. in situ consisted of a
AB
     component A contg. hydroxyethyl methacrylate [868-77-9], ethylene glycol
     dimethacrylate [97-90-5] crosslinking agent, 2,2'-methylenebis(4-methyl-6-
     tert-butylphenol) [119-47-1] inhibitor, and N,N-bis(hydroxyethyl)-p-
     toluidine [3077-12-1] accelerator, and a component B contg. dibenzoyl
     peroxide [94-36-0] initiator and glycerol diacetate [
     25395-31-7] solvent. Both components contained BaSO4 [7727-43-7]
     and Cab-O-Sil [7631-86-9].
                                 The polymn. velocity rate depended on the
     ratio of the components.
ST
     dental filler hydroxyethyl methacrylate
     Dental materials and fillings
IT
        (hydroxyethyl methacrylate polymers in)
     97-90-5
TΤ
```

```
RL: MOA (Modifier or additive use); USES (Uses)
        (crosslinking agent, for dental methacrylate fillers)
     868-77-9
IT
     RL: BIOL (Biological study)
        (dental fillers contg.)
     7631-86-9, biological studies
                                      7727-43-7 25395-31-7
IT
     RL: BIOL (Biological study)
        (dental methacrylate fillers contg.)
IT
     3077-12-1
     RL: BIOL (Biological study)
        (polymn. accelerator, for dental methacrylates)
IT
     94-36-0, biological studies
     RL: CAT (Catalyst use); USES (Uses)
        (polymn. catalyst, for dental methacrylate fillers)
IT
     119-47-1
     RL: BIOL (Biological study)
        (polymn. inhibitor, for dental methacrylate)
     25395-31-7
IT
     RL: BIOL (Biological study)
        (dental methacrylate fillers contg.)
RN
     25395-31-7 HCAPLUS
     1,2,3-Propanetriol, diacetate (9CI) (CA INDEX NAME)
CN
     CM
     CRN
          64-19-7
     CMF
         C2 H4 O2
HO-C-CH3
     CM
     CRN
          56-81-5
     CMF
         C3 H8 O3
        ОН
HO-CH_2-CH-CH_2-OH
L69
     ANSWER 29 OF 29 HCAPLUS
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AN
     1974:439398 HCAPLUS
DN
     81:39398
     Sugar acetate activators for peroxide bleaching agents
ΤI
     Nakagawa, Yunosuke; Sato, Koitsu; Hakozaki, Shori
ΙN
     Kao Soap Co., Ltd.
PA
     Ger. Offen., 13 pp.
SO
     CODEN: GWXXBX
DT
     Patent
     German
LA
IC
     46-6 (Surface Active Agents and Detergents)
     Section cross-reference(s): 39
FAN.CNT 2
     PATENT NO.
                       KIND
                                            APPLICATION NO.
                                            DE 1973-2344990
                                                              19730906
                             19740321
PI
     DE 2344990
                       Α1
                              KATHLEEN FULLER EIC1700 308-4290
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DE 2344990
                       B2
                            19810108
     DE 2344990
                       C3
                            19811022
     JP 49048580
                       A2
                            19740510
                                            JP 1972-92265
                                                             19720914
     JP 52006867
                       B4
                            19770225
PRAI JP 1972-92265
                            19720914
AB
     Mixts. of sugar acetates, e.g. glucose pentaacetate (I) [3891-59-6], with
     polyhydric alc. acetates, e.g. triacetin (II) [102-76-1], were
     used as activators for inorg. peroxide bleaching
     agents, e.g. Na perborate (III) [11138-47-9]. Thus, 100 parts
     0.5% III soln. contg. 0.5 part 50:50 I-II had bleaching value
     18.6 in Terg-O-Tometer bleaching test (10 min, 20.deg.) bs. 10.6
     or 2.1 for a III soln. contg. no II or no I and II, resp.
     activator peroxide bleaching agent; sugar acetate
ST
     activator peroxide; alc acetate activator peroxide;
     glucose acetate activator peroxide; triacetin activator
     peroxide; sodium perborate bleaching
     activator
IT
     Bleaching agents
        (activators for inorg. peroxide, polyhydric alc.
        acetate-sugar acetate mixts. as)
IT
     Solubilizers
        (polyhydric alc. acetates, for sugar acetates as bleaching
        agent activators)
IT
     126-14-7
                3891-59-6
                            7208-47-1
     RL: USES (Uses) -
        (activators, contg. polyhydric alc. acetates, for inorg.
      peroxide bleaching agents)
IT
     102-76-1
                111-55-7
                           4178-89-6
     RL: USES (Uses)
        (activators, contg. sugar acetates, for inorg. peroxide
     bleaching agents)
ΙT
     3313-92-6 11138-47-9
     RL: USES (Uses)
        (bleaching agents, activators for, polyhydric alc.
        acetate-sugar acetate mixts. as)
IT
     102-76-1
     RL: USES (Uses)
        (activators, contg. sugar acetates, for inorg. peroxide
     bleaching agents)
RN
     102-76-1 HCAPLUS
     1,2,3-Propanetriol, triacetate (9CI) (CA INDEX NAME)
CN
         OAc
AcO-CH2-CH-CH2-OAc
IT
     3313-92-6 11138-47-9
     RL: USES (Uses)
        (bleaching agents, activators for, polyhydric alc.
        acetate-sugar acetate mixts. as)
RN
     3313-92-6 HCAPLUS
     Peroxydicarbonic acid, disodium salt (8CI, 9CI) (CA INDEX NAME)
CN
HO2C-O-O-CO2H
```

2 Na

RN 11138-47-9 HCAPLUS

CN Perboric acid, sodium salt (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***